

LOG INFORMATION STANDARD

CUSTOMER TAPE SUBSET

Schlumberger

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SECTION 1

INTRODUCTION

Since the well logging industry began to use computer processing, a standard format has been needed for the exchange of well log information. To fill this need, Schlumberger has defined an information interchange format called the Log Information Standard (LIS) Format. This format was designed to work with various types of computers and with various types of information in a real-time data acquisition environment. This information ranges from sensor response (log) data to interpretation parameters and binary bit patterns.

The LIS format was designed primarily for use with magnetic tape, although it may also be used with other types of storage media. A hierarchy is used for storing and retrieving data; this hierarchy separates physical representation from logical information interpretation. Each magnetic tape is kept logically complete by recording on each tape the information required to interpret the data on that tape.

The LIS format permits adaptation to new concepts while maintaining compatibility with previously written tapes with no significant effect on processing software.

The LIS format is made up of two structures: logical and physical. Logical structure refers to the type of information and the organization of the information; physical structure refers to the physical dimensions of the information (e.g., how much space it occupies).

Logical Structure

From the logical aspect, the LIS format is divided into four levels:

- Logical Tape: made up of Logical Files
- Logical Files: made up of Logical Records
- Logical Records: made up of Bytes

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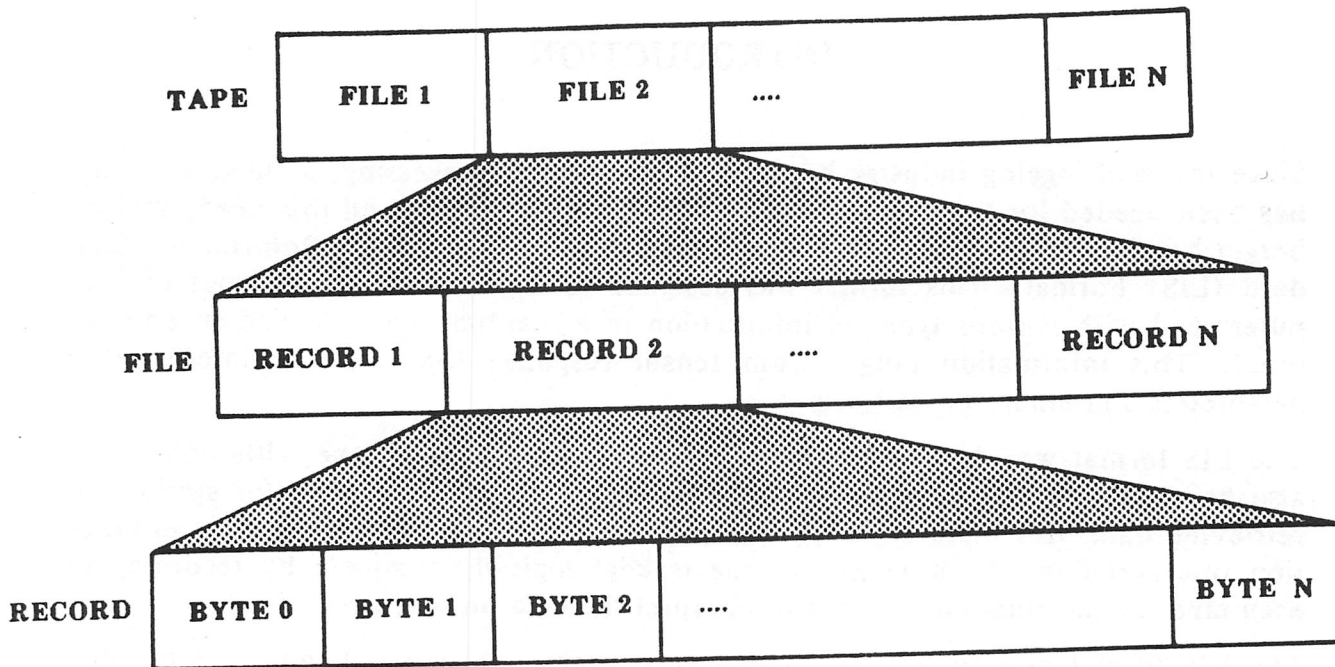


Figure 1. Logical Hierarchy

The relationship of these levels is illustrated in Figure 1.

A logical tape is a group of logical files. Each logical file is made up of a group of related logical records treated as a unit. Each logical record is a collection of related data treated as a unit. Each logical record is composed of bytes, or data characters.

LIS defines specific ways to label logical tapes, logical files, and logical records. There is no strict definition of the type of log data which a logical tape or a logical file may contain. Sometimes a logical tape may contain all the data from a single well. However, this is not always true.

LIS does, however, specifically define many types of logical records. Each logical record has a two-byte header at the beginning of the record which contains a code identifying the record type. This record type is used to tell the program how to interpret the record.

Unlike many other systems, relative position in the sequence of records is not the key to understanding the contents of a record. Computer programs that read LIS do not have to be able to interpret every type of record they encounter. Unknown types can normally be ignored with safety.

Files and tapes have both header and trailer records at their beginnings and ends. These header- or trailer-type logical records contain information about the logical files or logical tapes which they begin or end.

Logical Tapes and Logical Files are not strictly defined with respect to the detailed identification of log data. In some instances a Logical Tape corresponds to the data from a single well. This correlation does not hold in all cases, however, and programs

which read LIS tapes should not assume such a restriction.

Physical Structure

Physical structure in the LIS format describes the way that logical tapes, files, and records are represented on a physical reel of tape. A physical reel of tape is composed of a group of physical records arranged in a specific order. A physical record is a group of eight-bit bytes, also arranged in a designated order. Only at the byte level are logical and physical structures equal. There are no physical files in the LIS format, so the relationship within the physical structure is:

- Physical reel: Made up of physical records
- Physical records: Made up of bytes

The relationship is shown in Figure 2.

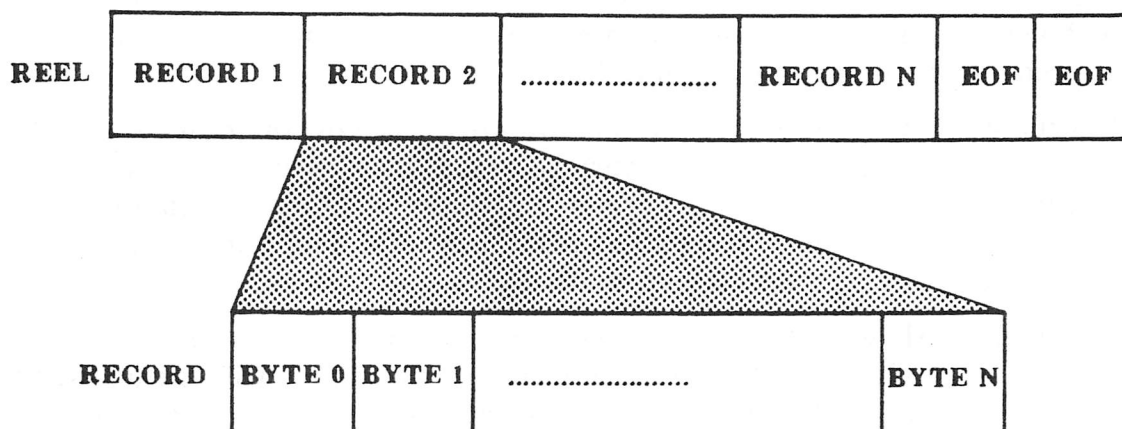


Figure 2. Physical Hierarchy

A special type of physical record, called a file mark or an EOF, is used to identify the end of a logical file. The purpose is to allow special EOF- recognition hardware to be used for high-speed tape searches.

Two consecutive EOF's or an end-of-tape reflective marker indicate the end of a physical reel of tape.

A type of logical record called a Reel Header is used to identify a physical reel at its beginning. As with Logical Files and Logical Tapes, there is also a corresponding type of logical record called a Reel Trailer.

The hierarchies of logical and physical structures seem simple enough. However, when the two concepts are merged, complications may develop. (Some logical records may be bigger than the maximum size permitted for a physical record. A logical tape may span multiple physical reels, or a physical reel may contain multiple logical tapes. The physical record structure is designed to indicate whether logical records continue across physical record boundaries. The headers and trailers for logical tapes and physical reels also provide ways to continue and pack logical tapes with respect to physical reels.

By making a clear distinction between logical and physical structures, LIS permits a greater flexibility in transitions between different media. For example, it is possible to change physical record sizes without changing the logical records, without knowing how to interpret any logical records. Programs that deal with LIS format at the physical level need not know anything about logical records. Conversely, programs which interpret logical records do not need knowledge about physical representations.

Log Data Representation

A frame of data is a set of numbers corresponding to measurements or computed results at a particular index (usually depth, although in some instances time or some other index is used). Generally frames occur at regular intervals (e.g. every 6 inches in depth; however, irregularly spaced frames are not totally unknown. A data record is a logical record containing one or more frames of data.

Under LIS there are no fixed frame formats. In order to know the order and meaning of the numbers in a frame, the tape must be read. In particular, a certain type of logical record known as a Data Format Specification Record contains all the information necessary to interpret data records. Such information includes position in frame, identifying name, representation, units, etc.

Programs which work with the LIS format cannot define data in terms of relative positions in an array. Instead, data must be identified by name. This method requires an extra level of system software which can read the Data Format Specification Record and cross reference between names and numbers. However, the advantage of this approach is that application software does not have to interpret the various frame formats. In addition, data channels can be added or deleted with no effect on programs which do not use the new or missing channels.

Evolution

Most logical structures in LIS have an associated type and/or sub-type. By knowing the record type, an interpreting program can handle both new and old versions of the same type of record. New features and concepts may be added while maintaining compatibility with tapes which were made in an earlier version of the LIS format.

SECTION 2

RECORD STRUCTURE

An LIS tape is generated on a 9-track magnetic tape encoded at 800 or 1600 bits per inch written in odd parity. The information on the tape is further divided into files and finally into individual records. Record length is defined in bytes; a byte is eight bits.

Physical Records

Every physical record on the reel of magnetic tape uses the first four bytes as a physical record header. The first two bytes of the header contain the length of the record (the number of bytes), including the physical record header. The third and fourth bytes of the record specify physical record attributes. Bits of the attribute bytes are used to identify some properties of the physical record. A physical record can be terminated with a physical record trailer; however, the trailer is optional. Figure 3 shows the physical record header and the general construction of a physical record.

BYTE	0	1	2	3
BITS	0-7	8-15	16-23	24-31

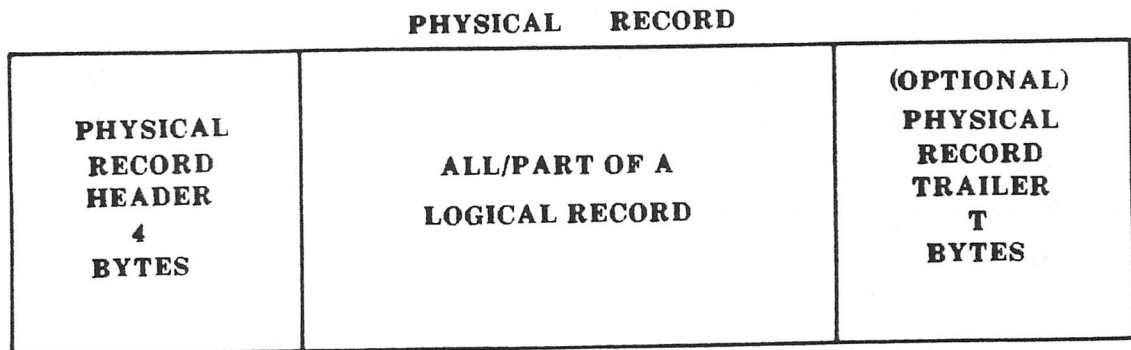


Figure 3. Physical Record Format

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The length of a logical record, or logical record fragment, is given by:

$$\text{Logical Record Length} = (\text{Physical Record Length} - 4 - T) \text{ Bytes}$$

The value of T may vary from 0 to 6 bytes.

Physical Record Header

The Physical Record Header is 32 bits in length. Bit 0 is high order; bit 31 is low order. If bits 19, 21, and 22 are set, each bit reserves two bytes in the physical record trailer. Table 1 lists the contents of the physical record header as a bit string. Each bit is described following the table.

Physical Record Header	
Bit	Definition
0 - 15	Physical Record Length
16	Undefined (Reserved)
17	Physical Record Type
18	Checksum Type Bit 1
19	Checksum Type Bit 2
20	Undefined (Reserved)
21	File Number Presence
22	Record Number Presence
23	Undefined
24	Undefined (Reserved)
25	Parity Error
26	Checksum Error
27	Undefined
28	Undefined (Reserved)
29	Undefined
30	Predecessor Continuation Bit
31	Successor Continuation Bit

Physical Record Length is a 16-bit, unsigned, binary integer which specifies the length, in bytes, of information in the physical record. The length, which includes the Physical Record Header and the Trailer (if present) may be smaller than the actual number of bytes written. That is, a physical record may be padded with null characters to guarantee a minimum record size.

Physical Record Type defines the type code for a physical record. Figure 3 illustrates a type 0 physical record, which is the only type of physical record defined by LIS at this time.

Checksum Type Bits 1 and 2 designate the type of checksum associated with this physical record. If a Checksum is present, it is the last entity of the Physical Record Trailer.

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Checksum Type Bits 1 and 2	
00	No checksum present
01	16-bit Checksum (see Appendix P)
10	Undefined
11	Undefined

"20

File Number Presence defines whether or not a File Number entry is present in the Physical Record Trailers. If a File Number is present, it will precede the Checksum in the Physical Record Trailer. If the Checksum is not present, the File Number is the last entry in the physical record trailer. If present, the File Number is a 16-bit integer quantity.

File Number Presence	
0	No File Number entry present
1	File Number entry is present

Record Number Presence defines whether or not a Record Number entry is present in the Physical Record Trailer. If a Record Number is present, it is the first entry in the Physical Record Trailer, and it is composed of a 16-bit integer quantity showing the record count from the beginning of the file.

Record Number Presence	
0	No Record Number entry present
1	Record Number entry is present

The **Parity Error Bit** indicates that a parity error has occurred while copying this record sometime in the past. Data may be transferred from one medium to another several times. Therefore, it is necessary to preserve the status of the record during each transfer.

Parity Error Bit	
0	No parity error
1	A parity error occurred previously

The **Checksum Error Bit** indicates that a checksum error occurred while this record was being copied sometime in the past.

Parity Error Bit	
0	No checksum error
1	Checksum error at some prior time

The **Predecessor and Successor Continuation Bits** provide a mechanism by which a logical record may span several physical records. The definitions of the bit values are:

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Predecessor Continuation Bit	
0	This physical record is not associated with the previous physical record.
1	This physical record is associated with the previous physical record.

Successor Continuation Bit	
0	This physical record is not associated with the next physical record.
1	This physical record is associated with the next physical record.

So, if a logical record were to span four physical records, the values of the Predecessor and Successor continuation bits for the four records would be:

	Predecessor	Successor
Record 1:	0	1
Record 2:	1	1
Record 3:	1	1
Record 4:	1	0

If a logical record spans several physical records, then only the first physical record contains a logical record header. The following physical records contain only the succeeding sections of the logical record.

If the Predecessor Continuation Bit in the Physical Record Header is 0, then the physical record contains a logical record header. If its value is 1, the physical record does not contain a logical record header.

The complete logical record may be reconstructed by concatenating the logical record components, in order, from each of the physical records.

Physical Record Trailer

Physical records may optionally have trailers. The presence, length, and contents of the trailer are defined by three Physical Record Attribute bits defined in the previous section.

The sequence of information in the trailer is shown below. Any or all of the items may be missing:

Physical Record Trailer			
Entry	Size	Rep. Code	Header Bit Controlling
Record Number	2	79	22
File Number	2	79	21
Checksum	2	79	19

Bits 19, 21, and 22 in the Physical Record Header indicate the presence or absence of each of these three pieces of information in the Physical Record Trailer.

Logical Records

Logical records form the basic coherent bodies of information in the LIS format. A logical record may be contained within a single physical record, or it may span several physical records.

Logical records begin with a two-byte logical record header. The first byte of the logical record header contains the record type. The second byte is reserved.

Logical Record Header

Byte	0	1
Bits	0-7	8-15
	Logical	Reserved
	Record	
	Type	

Figure 4 shows how logical and physical records could be organized on a tape.

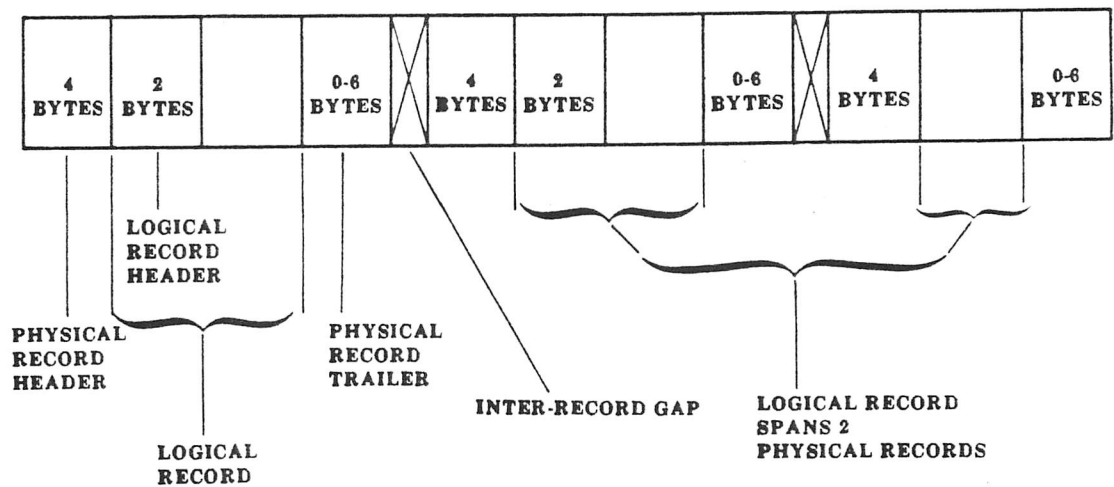


Figure 4. Organization of Logical and Physical Records on a Tape

SECTION 3

LOGICAL FORMAT

Format Overview

Each physical record on the tape contains all or part of a coherent body of information called a logical record. Byte 1 of the Logical Record Header contains an identifier called a logical record type. Logical records of different types contain different pieces of information necessary to the understanding of the entire tape.

Of initial importance is the proper identification of the reel to be processed. This entity, which is called a **Reel**, is delimited by a **Reel Header Record** at the start and two EOF marks at the end. A **Reel Trailer**; may precede the double EOF. The Reel Header Record contains an eight-character name which should match the identification written on the outside of the magnetic tape canister.

Between the Reel Header Record and the end of the tape are written a number of logical records of varying types. These records are grouped into identifiable entities called **Logical Tapes**. The Logical Tape consists of a number of logical records grouped in a specific order. It is bounded by a **Logical Tape Header Record** at the beginning and an optional **Logical Tape Trailer Record** at the end. Any records which are found between the header and trailer records are said to be a part of that Logical Tape. In the absence of a Logical Tape Trailer Record, a Logical Tape may be presumed to be terminated by the occurrence of a new Logical Tape Header Record, or by the occurrence of two successive EOF's. For this reason, the Logical Tape Trailer Record can be considered to be an optional record in most cases.

However, in some instances a Logical Tape structure may span more than one physical reel of tape. In this instance the reel of tape must be terminated by a Reel Trailer (logical) Record which provides a linkage to the next reel of tape. Thus, a Logical Tape may not span more than one physical reel of tape if it is terminated by a double-EOF.

The Logical Tape will be further subdivided into entities called **Files**. A File is delimited by a **File Header Record** at the beginning and a **File Trailer Record** at the end. A file is also delimited by EOF's before the File Header and after the File Trailer Records.

Identification Mechanisms

Each level of the identification hierarchy, (Logical Tape, File, or Logical Record) has a specific mechanism for identification. The logical tape is identified by an 8-character name found in the Logical Tape Header Record. Likewise, the File is identified by a 10-character name found in the File Header Record.

An additional identification mechanism is used to specify the format of a data record. First, we need some definitions:

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- **ENTRY** - A single value. For data, this may be a single number giving a single sensor response at a single index (depth) value.
- **BLOCK** - A grouping of a number of **Entries**.
- **FRAME** - For data, a **Frame** is a **Block** composed of a number of **Entries**. **The Frame** provides a number of sensor responses (**Entries**) at a single index (depth) value.

Log data is recorded as logical records identified as **Data Records**. A **Data Record** is composed of an integral number of frames.

We need, then, a way to define each **Entry** in a single **Data Record**. This mechanism is a **Data Format Specification Record**.

A **Data Format Specification Record** (logical record type 64) provides a definition of how to decode all **Data Records** (of a type identified within the **Data Format Specification Record**) which follow. This definition remains valid until another **Data Format Specification Record** is encountered. Usually there is one **Data Format Specification Record** in a file, positioned somewhere near the beginning of the file, but it is not mandatory that this be the case. The only requirement is that a **Data Format Specification Record** must precede the first **Data Record** of a Logical Tape. Some LIS tapes will contain two identical copies of each **Data Format Specification Record** for redundancy.

The **Data Format Specification Record** is composed of two types of **Blocks**. An **Entry Block** defines information which pertains to a **Data Record** as a whole, i.e., to a group of **Frames**. A **Datum Specification Block** defines a single **Entry** of a **Frame**. Thus, all of the **Datum Specification Blocks** of a **Data Format Specification Record**, taken together, define a **Frame**, as it exists in the **Data Records** which follow.

The **Entry Blocks** of a **Data Format Specification Record** are, in general, not essential. The only **Entry Block** which must be present in each **Data Format Specification Record** is the **Terminator Entry Block**. This block indicates in the **Data Format Specification Record** where the **Entry Blocks** stop and the **Datum Specification Blocks** start. There are two reasons why a particular **Entry Block** may not be present in a **Data Format Specification Record**:

1. The desired quantity can be calculated from other information on the tape; or
2. The absence of an **Entry Block** implies that the default value will be used (refer to the description of a **Data Format Specification Record** in Section 4).

Logical Configuration

An LIS tape may contain the following record types. If any other types occur, they may be safely ignored.

Reel Header (Type 132.)

The **Reel Header Record** is the first record of any physical reel (and should appear nowhere else on the reel). It contains general information identifying the reel. If the

reel is part of a multi-reel grouping, then the reel header also contains the identification of the previous reel of the group.

Tape Header (Type 130.)

The Tape Header Record is the first record of a logical tape. It contains general information identifying the information content of this logical segment of the physical reel of tape. If many logical tapes are grouped into some larger structure, this record also contains identification of the previous logical tape in the structure.

File Header (Type 128.)

The File Header Record is the first record of any file on the tape. It contains general information identifying the file. It also contains identification of the previous file of the logical tape.

Information (Type 34.)

Information records contain identification information such as company name, well name, etc. They also contain computation parameters and environmental information.

Table Dump (Type 47.)

This type of record contains information used within Schlumberger's data processing system. The organization is not defined for general use, and records of this type should be ignored.

Data Format Specification (Type 64.)

The Data Format Specification Record identifies, in detail, the content and organization of data records that follow. It also identifies parameters such as number representation codes, etc.

Comments (Type 232.)

Comment records supply additional information about the product. They provide a free-form mechanism to convey information which may not fit conveniently into another type of record.

Data (usually Type 0.)

Data Records contain the logging data stored in the logical tape. Their structure is defined by the last preceding Data Format Specification Record. There may, in fact, be several different types of Data Records, each with its own type number and described by its own Data Format Specification Record.

File Trailer (Type 129.)

The File Trailer Record is the final record of any file. (It may contain identification of the next file in the logical tape.)

Tape Trailer (Type 131.)

The Tape Trailer Record is the final record of the logical tape. It may contain identification of the next logical tape in the structure. If no additional logical tapes follow on the same reel, this record is optional.

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Reel Trailer (Type 133.)

The Reel Trailer Record is the final record of the physical reel. It contains identification of the next physical reel in the set. This is an optional record.

Configuration

A typical grouping of the various logical record types is shown in Figure 5.

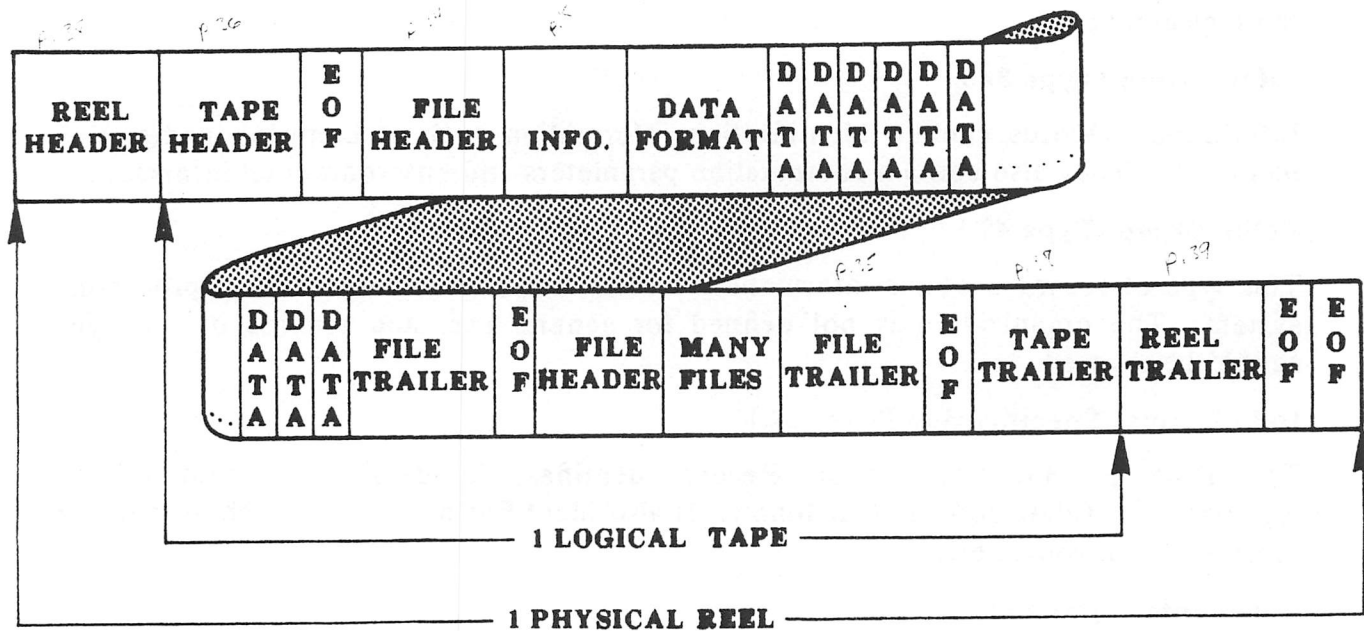


Figure 5. Reel of Tape

The physical reel is terminated by a Reel Trailer and two hardware EOF records. No encoded information follows the double EOF.

If multiple logical tapes are required, then they are stacked sequentially on the reel of tape (Figure 6). The trailer of one may name the header of the next. If multiple physical reels are required, the reel trailer may name the next physical reel.

The LIS format technically allows physical records of greater than 32,000 bytes in length. In practice some maximum lengths exist, although they are rather arbitrary and could increase at some future time. The current maximum physical record length is 1024 bytes with the exception of tapes containing waveform data. The maximum physical record length on a waveform data tape is approximately 5000 bytes.

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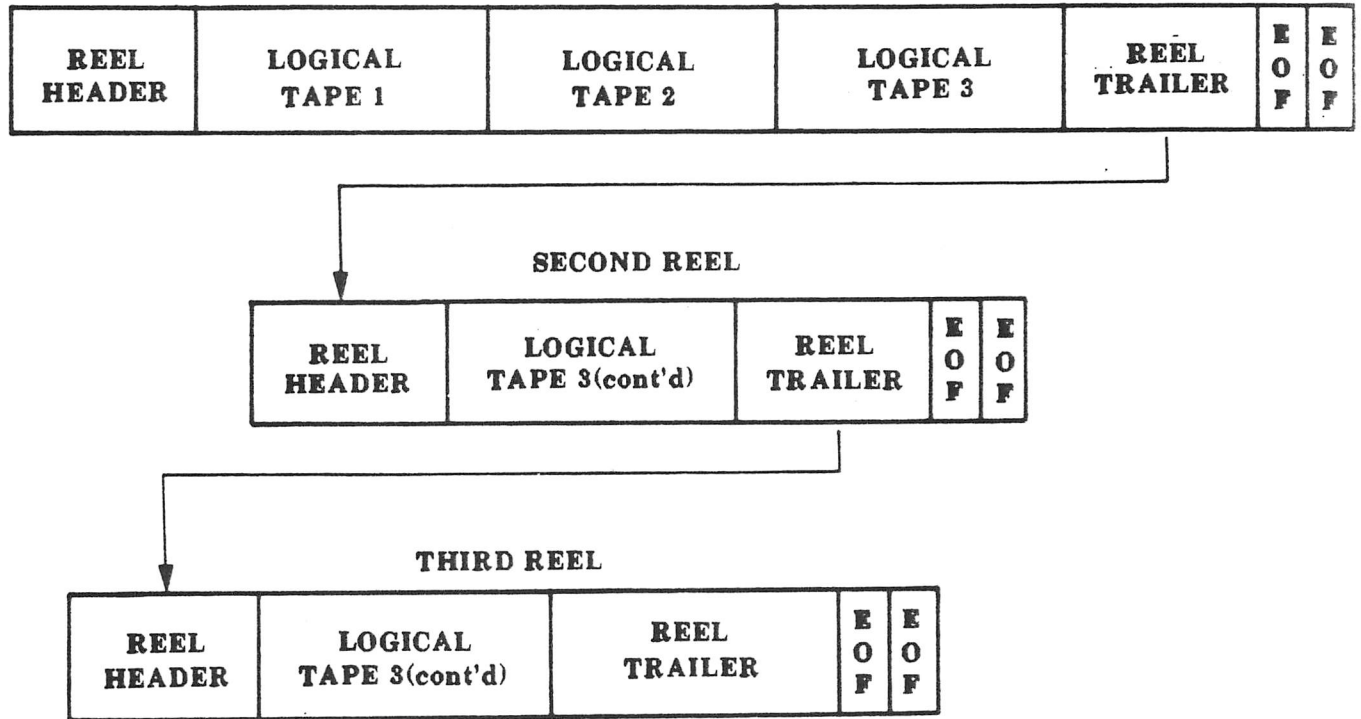


Figure 6. Relationship between Logical Tapes and Physical Reels

SECTION 4

DETAILED LOGICAL RECORD DESCRIPTIONS

This section contains specifications for all defined record types, arranged in numeric order. All numbers are decimal (base ten) unless otherwise noted. The descriptions may have information listed under the following headings:

- **Entry** - A short description of the entry defined by this line. If the entry is constant alphanumeric text, this text is shown in quotes, e.g., "." means a single period character.
- **Size** - A decimal number specifying the length of the entry in bytes. "V" is used to indicate variable size (i.e., defined on the tape but not in this manual).
- **Representation Code** - A numeric code used to indicate the representation of a corresponding entry. Representation Codes are listed in Appendix B.
- **Comments** - Most entries have comments. The numbering scheme for comments starts with the record type in which the comment appears. To avoid redundancy, some comments are cross-referenced to other record types.

Data Record (Type 0.)

Data Record (Type 0)			
Entry	Size	Repr. Code	Comment
Logical Record Header	2		0.1.1
Depth			0.1.2
First Frame			0.1.3
Last Frame			

This type of record must be preceded by a type 64 record which will define the data structure within the logical record.

COMMENT	EXPLANATION
---------	-------------

0.1.1	The Logical Record Header is described in Section 2.
-------	--

0.1.2	Depth may appear here (only once in each data record) or it may be contained in each data frame. Entry Block 13 in the Type 64 Data Format Specification Record specifies which mode of recording depth is used. Entry Block Types are defined in the section on Data Format Specification Record (Type 64). If Depth is recorded just once per record, then Entry Block Type 13 will be present and will have a value of 1. In this case the size, representation code, and units for the Depth entry are also given in the Data Format Specification Record in Entry Block Types 14 and 15. The depth given is the one for the first frame in the record. Other information required for computing the depth of other frames are given in Entry Block Types 4, 8, and
-------	--

9. If Entry Block Type 13 has a value of 0 (or if it is absent) then depth (or other index information) is contained as a normal frame entry in each frame and does not appear in this special position at the beginning of each data record.

0.1.3

Frame organization, size and representation codes are not pre-defined, but are described in detail within the Data Format Specification Record (Type 64) by means of Datum Specification Blocks.

Information Record (Type 34.)

See App. G for component codes

Information Record (Type 34.)			
Entry	Size	Repr. Code	Comments
Logical Record Header	2		0.1.1
Datum Block 1	M1		
Datum Block 2	M2		
Datum Block m	Mm		

The Information Record length is 2 plus the sum of the lengths of m Datum Blocks.

Datum Block			
Entry	Size	Repr. Code	Comments
Component Block 1	L1		
Component Block 2	L2		
Component Block n	Ln		

Component Block			
Entry	Size	Repr. Code	Comments
Component Type No.	1	66 <i>byte</i>	
Component Repr. Code (r)	1	66	
Component Size (Ji)	1	66	
Component Category	1	66	
Component Mnemonic	4	65	
Component Units	4	65	
Component	Ji	r	

$$L_i = (J_i + 12) \text{ bytes}$$

$$M = \sum_{i=1}^n (J_i + 12) \text{ bytes}$$

Figure 7 illustrates the layout of the Type 34 Information Record.

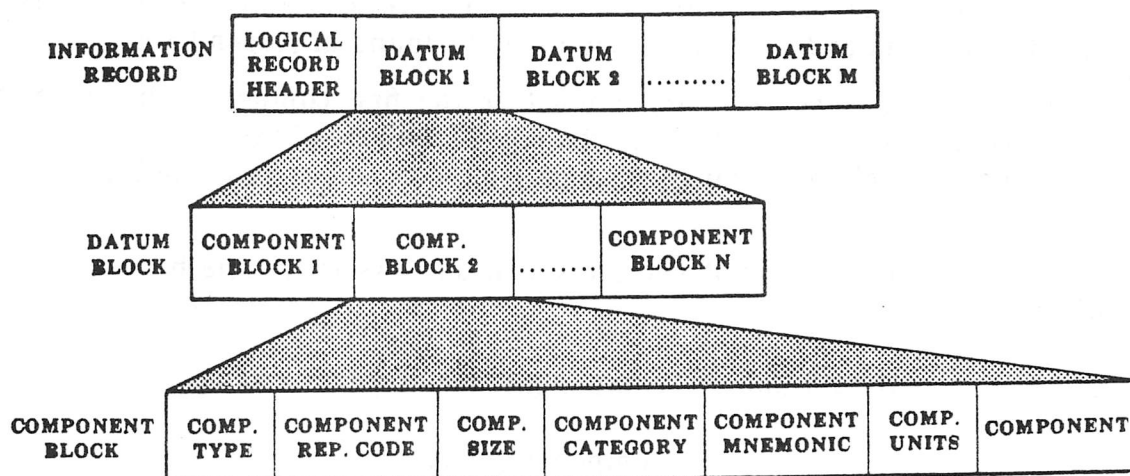


Figure 7. Information Record (Type 34.)

An Information Record can be used to represent a wide variety of data ranging from a description of how a curve is presented on a graphic display to a description of a parameter used in a computation. Depending upon the complexity of the information to be represented, one of two techniques may be used in composing an Information Record. The first technique described is the most general, and is used to represent table-like data structures, i.e., information made up of rows and columns. The second technique is a simpler mechanism used to encode several single value parameters.

Tables in Information Records

A logical unit of information, e.g., how a single curve is presented on a graphic display, may consist of several pieces of information, e.g., track position, trace coding, scale information, etc. Visualize this collection of information for a single curve as one row in a table. The table (consisting of several rows) describes presentation information for a collection of curves. Each Datum Block in an Information Record is intended to convey one logical unit of information, while the Component Blocks making up a Datum Block correspond to the individual pieces of information (i.e., one element or column entry of the row).

When the table context of Information Records is used, the first Datum Block of the record will be a single Type 73 Component Block. The quantity contained in this Datum Block is the name of the specific table. Figure 8 illustrates a complete Information Record using the table storage technique.

The first Component Block in all subsequent Datum Blocks (rows of the table) is Type number 0. All Component Blocks following a Component Block of component type 0 will belong to the same Datum Block (i.e., belong to the same row of the table).

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until the next type 0 Component Block is encountered. All of these intermediate Component Blocks are of Type 69.

Figures 8 and 9 are examples of entire Information Records. Mnemonics for use in Information Records and additional discussion may be found in Appendix G.

If a component type 73 appears at all, it must be the first component block in the record; all remaining component blocks in the record are part of the table identified in the type 73 component block. That is, a single table occupies a complete Information Record.

As illustrated in Figure 8, it is not necessary that all rows in a table have the same number of entries.

datum block component block type 73

component block type 0

component block type 69

component block type 69

datum block component block type 69

component block type 69

component block type 69

component block type 69

component block type 0

component block type 69

component block type 69

datum block component block type 69

component block type 69

component block type 69

component block type 69

component block type 0

component block type 69

component block type 69

datum block component block type 69

component block type 69

component block type 69

component block type 69

component block type 69

component block type 0

component block type 69

component block type 69

datum block component block type 69

component block type 69

component block type 69

component block type 69

Figure 8. Record with an Identifier Block

As a more concrete example, let's take a specific table and see how it translates into an Information Record.

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A Film table is used to define the depth scale for the graphic display of a set of log data. It may also define the grid pattern on which the log data is presented. Shown in tabular form, the Film table might look like this:

MNEM	GCOD	GDEC	DEST	DSCA
1	E2E	-2--	PF1	S5
2	BBB	----	PF2	S5

The important point of this illustration is how we map the individual table entries into Component Blocks, not what the individual entries mean in detail.

Figure 9 illustrates the construction of an Information Record which contains the table shown above.

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Logical Record Header		
Component	Type	73
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	TYPE
Component	Units	
Component		FILM
Component	Type	0
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	MNEM
Component	Units	
Component		1
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	GCOD
Component	Units	
Component		E2E
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	GDEC
Component	Units	
Component		-2--
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	DEST
Component	Units	
Component		PF1
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	DSCA
Component	Units	
Component		S5

Figure 9. Information Record

Logical Record Header		
Component	Type	0
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	MNEM
Component	Units	
Component		2
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	GCOD
Component	Units	
Component		BBB
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	GDEC
Component	Units	
Component		----
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	DEST
Component	Units	
Component		PF2
Component	Type	69
Component	Rep Code	65
Component	Size	4
Component	Category	0
Component	Mnemonic	DSCA
Component	Units	
Component		S5

Figure 9. (continued)

Note that the category and units fields of the Component Block are not used in the table concept. Also note that within this concept the mnemonics used in the mnemonic entry of the Component Block are dictionary items (a list is contained in Appendix G); however, the quantity entered as the component itself is not a dictionary item. The component entries themselves are defined within the context of the system which understands the table.

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The mechanism shown in the following table is no longer used. Current intentions are to remove it from the LIS documentation with the next release; therefore, its use in future implementations is discouraged.

Table Information Record	
Datum Block	Component Type 0
	Component Type 1
	Component Type 2

This mechanism uses the subdivision of Information Record Mnemonics into groups called categories. With the next release of the LIS documentation, this subdivision (i.e., category) of Information Record Mnemonics (Appendix G) will be discontinued.

Single Parameters in Information Records

In some cases you may want to encode one, or several, single parameter values in an Information Record. An example of this is a table with only one column. You can use a simplified form for the Information Record, omitting the Type 73 Datum Block. Instead, you will have one or more Type 0 Component Blocks. The following table illustrates the Single Parameter Information Record.

Single Parameter Information Record	
Logical Record Header	
Component Block Type 0	
Component Block Type 0	
Component Block Type 0	
Component Block Type 0	

This type of Information Record might be used to store identifying information such as Company Name (CN), Well Name (WN), etc. For example, the well name is given in this single Component Block.

Component	Type	0
Component	Rep Code	65
Component	Size	8
Component	Category	(undefined)
Component	Mnemonic	WN
Component	Units	(none)
Component		Smith N1

Table Dump Record (Type 47.)

This logical record contains transient information which is used by Schlumberger's data processing system. If it is encountered, it may be ignored.

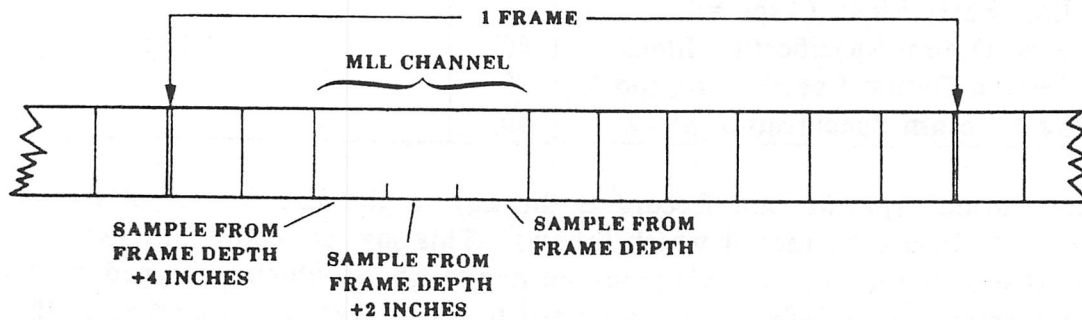
Data Format Specification Record (Type 64.)

Data Format Specification Record (Type 64.)			
Entry	Size	Repr. Code	Comments
Logical Record Header	2		0.1.1
First Entry Block	V		64.2
Second Entry Block	V		
Last Entry Block (Type=0)	V		
First Datum Specification Block	40		64.31
Second Datum Specification Block	40		
Last Datum Specification Block	40		

The Data Format Specification Record is the key to the LIS format; it defines the format of data in a data record which follows. This logical record has two sections. The first is a sequence of miscellaneous entries, each of which is tagged with type, size, and representation code. These are used to record various properties of the data file, data records, and data frames. Following these is a sequence of Datum Specification Blocks. Each Datum Specification Block provides information required to identify and decode one frame entry (curve). The order of these is the order of data in the frame. A datum has one of several structures determined by examining the Size, Number of Samples, and Representation Code entries.

A standard frame entry is sampled once per frame. The Number of Samples is one, and the Size matches the size associated with the Representation Code.

A Fast Channel is sampled more than once per frame. A Fast Channel has a Number of Samples which is greater than one. The Size entry of the Datum Specification is the product of the Number of Samples multiplied by the number of bytes for each sample. The spacing between Fast Channel samples, which is equal, is the interval between frames divided by the Number of Samples. The depth (or other index) of the frame applies to the last of the multiple samples, with earlier samples' depths interpolated between the current and previous frame depth. For example, a Micro Laterolog curve (MLL) is too active to be adequately sampled only once every six inches. It is common practice to sample it every two inches and store three successive samples in a single frame, as shown in Figure 10. In this case, the log was run going up-hole, and frame spacing is six inches.



Number of samples = 3

Size = 6 bytes

Representation Code = 49 (16-bit floating point, each sample)

Figure 10. Fast Channel

A Data Block defines many entries at a frame position with one Datum Specification Block. In this case the Number of Samples is one because all entries are sampled at the same index (usually depth). The number of entries in the datum is the Size divided by the number of bytes associated with the Representation Code.

For example, a waveform may consist of 512 sixteen-bit numbers measured versus time at a single depth. The Datum Specification Block contains the following entries:

Number of Samples	1
Size	1024 bytes
Representation Code	79 (a two-byte integer)

The total number of entries in the Data Block is calculated as:

$$\text{Number of entries} = \frac{\text{Total Size}}{\text{Size per entry}} = \frac{1024}{2} = 512 \text{ entries}$$

COMMENT

EXPLANATION

64.2

Miscellaneous entries in a Data Format Specification are accompanied by type, size, and representation code in an Entry

LOG INFORMATION STANDARD

Block as follows:

Entry Block			
Entry	Size	Repr.	Comments
Entry Block Type	1	66	64.11
n - Size	1	66	
r - Representation Code No.	1	66	
Entry	n	r	

COMMENT

EXPLANATION

64.11

The following Entry Block Types have been defined:

Entry Block Types		
Entry	Comment	Short Description
0	64.11.0	Terminator (No more entries)
1	64.11.1	Data Record Type
2	64.11.2	Datum Specification Block Type
3	64.11.3	Data Frame Size
4	64.11.4	UP/DOWN Flag
5	64.11.5	Optical Log Depth Scale Units
6	64.11.6	Data Reference Point
7	64.11.7	Units of above
8	64.11.8	Frame Spacing
9	64.11.7	Units of above
11	64.11.11	Maximum Frames/Record
12	64.11.12	Absent Value
13	64.11.13	Depth Recording Mode
14	64.11.7	Units of Depth in Data Records
15	64.11.15	Repr. Code for Output Depth
16	64.11.16	Datum Specification Block Sub-type

The only required Entry Block is type 0 (terminator entry block). All other Entry Blocks are optional.

The following table shows some sample Entry Blocks:

LOG INFORMATION STANDARD

Entry Blocks		
Entry No.	Value	Explanation
1	0	Type 0 Data Records being used
2	0	Type 0 Datum Specification Blocks being used
3	44	Frame length defined by Datum Specification Blocks
4	1	File logged going up-hole (decreasing depths)
5	1	Original field log was scaled in feet
8	60	Frame space is 60 tenth-inches
9	.1IN	(i.e., six inches)
12	-999.25	This value is written in a frame entry when there is no valid data present.
13	1	Depth will be written once per data record.
14	.1IN	in units of .1 inches
15	73	and encoded as a 32-bit integer
16	1	Sub-Type 1 is being used
0	1	Pad out cumulative entry block lengths to even number of bytes.

Entry Block Types 13, 4, 8, 9, 14, and 15 are important when depth is written only once per data record.

COMMENT

EXPLANATION

- 64.11.0 Required as the last entry in the string of Entry Blocks. A zero entry terminates the string. The terminator entry size must be chosen as 0 or 1 so that the number of bytes in the record through the terminator block is even.
- 64.11.1 Data record type indicates the logical record type number which will be used for data records with this format specification. Thus, several different types of Data Records can be simultaneously defined. The default Data Record Type is 0.
- 64.11.2 Datum Specification Block Type defines which Block type is being used. The default is type 0.

- 64.11.3 Data Frame Size is the size, in bytes, of a data frame. (Size is not usually needed. However, if it is required and absent, the size can be calculated from the size entries in the Datum Specification Blocks.)

- 64.11.4 UP/DOWN flag corresponds to the direction in which the data was logged (1 = up, 255. = down, 0 = neither). The default is up.

- 64.11.5 This flag specifies the depth units used on the optical log on the original recording (1 = feet, 255. = meters, 0 = time). The default is feet.

- 64.11.6 Data Reference Point - There is a point on the tool string called the tool reference point. Its distance from the surface corresponds to measured depth. The data reference point is another point which is fixed relative to the tool string. At any instant during the real-time acquisition of data, the data reference point stands opposite the part of the hole to which the current output corresponds. This value is the distance of the data reference point above the tool reference point. It may be positive or negative. It is useful in determining the significance of data, such as tension or frame duration, which are not actually a function of depth. If absent, the value is undefined on the tape.

- 64.11.7 Units for Data Reference Point value are expressed as 4 alphanumeric characters (e.g., .1IN). The default is expressed in tenths of an inch.

- 64.11.8 Frame Spacing is the depth difference between frames. If absent, the value may be calculated from successive data frames. Also, if the value is absent, the frame spacing need not be constant, since depth is encoded in each frame.

- 64.11.11 This is the maximum number of frames which will fit in a data record. This will normally be the number of frames for all but the last record. (This value usually is not needed, but if it is required and absent, the value may be computed. Headers and trailers, the frame size, and the record depth, if present, are subtracted from record size.

- 64.11.12 Absent value defines a value which, if found as a frame entry, implies that the entry is not real data and should be ignored. The default value is -999.25, but absence of this entry block may indicate that no absent value was used.

- 64.11.13 Depth recording mode flag - If present (with a value of 1), depth occurs only once per data record preceding the first frame. When depth is recorded in this mode, an entry block 14 will be present to specify the units of depth; and an entry block

type 15 will be present to define the representation code of the depth. The frame sampling interval in this case is constant, and the depth for each successive frame in the record (after the first one) can be computed. Entry Blocks 4, 8, and 9 supply the necessary information to compute the depths of these successive frames. This mechanism makes it possible to maximize the amount of data on the tape. If this entry block is not present or the value indicates that depth does not occur once per data record as just described (i.e., its value is 0), depth normally appears in each frame as described by a Datum Specification Block. By including depth in every frame, the value is explicit and the frame sample interval is known implicitly. 1 = present, 0 = absent. If this entry is absent, the default value of 0 is assumed.

- 64.11.15 This is the representation code that applies to depth if it is stored at the beginning of a data record. See Appendix B, Data Representation Codes.
- 64.11.16 This entry block gives the sub-type number of the Datum Specification Block, which is used to indicate minor variations of the Datum Specification Block form. If absent, a sub-type 0 is the default. Sub-type 1 Datum Specification Blocks have a new entry called "Process Indicators", and the API codes are represented as a 32-bit integer.
- 64.31. A type 0, sub-type 0 Datum Specification Block is organized in the following format.

LOG INFORMATION STANDARD

Type 0, Sub-Type 0 Datum Specification Block			
Entry	Size	Repr. Code	Comment
Mnemonic	4	65	64.31.1 (1)
Service ID	6	65	64.31.2 (5)
Service Order No.	8	65	64.31.3 (11)
Units	4	65	64.31.4 (19)
API Log Type	1	66	64.31.5 (23)
API Curve Type	1	66	64.31.5 (24)
API Curve Class	1	66	64.31.5 (25)
API Modifier	1	66	64.31.5 (26)
File Number	2	79	64.31.9 (27)
Size	2	79	64.31.10 (29)
0	2	79	(31)
Process Level	1	66	64.31.12 (33)
Number of Samples	1	66	64.31.13 (34)
Representation Code	1	66	64.31.14 (35)
0	1	66	(36)
0	4	73	(37)

The total size of a type 0, sub-type 0 Datum Specification Block is 40 bytes.

A type 0, sub-type 1 Datum Specification Block is organized in the following format:

Type 0, Sub-type 1 Datum Specification Block			
Entry	Size	Repr. Code	Comment
Mnemonic	4	65	64.31.1 (1)
Service ID	6	65	64.31.2 (5)
Service Order No.	8	65	64.31.3 (11)
Units	4	65	64.31.4 (19)
API Codes	4	73	64.31.18 (23)
File Number	2	79	64.31.9 (27)
Size	2	79	64.31.10 (29)
0	3	66	(31)
Number of Samples	1	66	64.31.13 (34)
Representation Code	1	66	64.31.14 (35)
Process Indicators	5	77	64.31.17 (36)

The total size of a type 0, sub-type 1 Datum Specification Block is 40 bytes. This block defines the format of one entry in a data frame.

COMMENT EXPLANATION

64.31.1 Mnemonic for the datum. Appendix C contains the list of mnemonics and their definitions.

64.31.2 Service ID - Identifies the tool or tool string used to measure the datum or for a computed product, the name of the product.

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This identification is not a controlled dictionary mnemonic; it may be free-form.

- 64.31.3 Service Order Number - A unique number which identifies the logging trip to the wellsite.
- 64.31.4 Units - Units for the datum, e.g., inch. Unit mnemonics are listed in Appendix D.
- 64.31.5 API Codes (Sub-type 0) - This is the original API log/curve code system which uses a two-digit curve code. It is largely outdated. (Ref: API Bulletin D-9 Feb, 1973. In addition, an update was made by the Canadian Well Logging Society in 1975).
- 64.31.9 File Number - The file number at the time that the data was first acquired (for wellsite data acquisition tapes only) and written. This number, service order number, and service ID, uniquely identify any data string for the purpose of merging or other processing.
- 64.31.10 Size - The number of bytes reserved for the datum in the frame. If negative, output has been suppressed, although space is still reserved in the frame. The amount of space reserved is the absolute value of this entry.
- 64.31.12 Process Level (Sub-type 0) - A measure of the amount of processing done to obtain the datum. The size of the number increases in proportion to the amount of processing, but the system has never been objectively defined.
- 64.31.13 Number of samples of the datum per frame. This number multiplied by the size associated with the representation code equals the size of the block reserved for this datum. See 64.31.10.
- 64.31.14 Representation Code - Numerical representation of the datum (See Appendix B).
- 64.31.17 Process Indicators (Sub-type 1) - Used to designate the processing or corrections performed on the datum. Each bit in the Process Indicators represents a different computation. A value of 1 means processing has been done; a value of 0 means processing has not been done. A datum may undergo several types of correction, so multiple flags may be set. The forty bits are assigned as follows:

Process Indicators	
Bit Number	Description
0	Original logging direction
1	
2	True vertical depth correction
3	Data channel not on depth
4	Data channel is filtered
5	Data channel is calibrated
6	Computed (processed through a function former)
7	Derived (computed from more than one tool)
8	Tool defined correction 2
9	Tool defined correction 1
10	Mudcake correction
11	Lithology correction
12	Inclinometry correction
13	Pressure correction
15	Temperature correction
16	Unassigned
17	Unassigned
18	Unassigned
19	Unassigned
20	Unassigned
21	Unassigned
22	Auxiliary data flag
23	Schlumberger proprietary
24-39	Unassigned

Bits 0 and 1 form a single entry which defines the original logging direction for this particular channel. A value of 01 indicates the original logging direction was down-hole. A value of 10 indicates the original logging direction was up-hole. A value of 00 indicates an ambiguous original logging direction (e.g., stationary). A value of 11 is currently undefined.

64.31.18

API Codes (Sub-type 1) - The API log/curve codes used in this Datum Specification Block conform to API BUL D-9, Third Edition, dated February, 1981. The API codes are represented as a 32-bit integer. The single number is obtained by concatenating the decimal representations of the API codes and the resulting decimal number is converted to 32-bit binary.

API Codes			
dd	ddd	dd	d
Log Type	API Curve Type	API Curve Class	API Modifier

Using the main run Gamma Ray curve from a Density Tool as an example,
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Log Type=	45
Curve Type=	310
Curve Class=	01
Modifier=	1

The eight-digit decimal integer, then, is: 45310011

File Header Record (Type 128.)

File Header Record (Type 128.)			
Entry	Size	Repr. Code	Comments
Logical Record Header	2		0.1.1
File Name	10	65	128.2
2 blanks	2	65	130.3
Service Sub Level Name	6	65	128.3
Version Number	8	65	128.6
Date of Generation	8	65	128.8
1 blank	1	65	
Maximum Physical Record Length	5	65	128.10
2 blanks	2	65	
File Type	2	65	128.12
2 blanks	2	65	
Optional Previous File Name	10	65	128.14

The File Header Record is 58 bytes in length. It defines the beginning of a file, and it must be the first logical record of every file.

COMMENT EXPLANATION

128.2 A unique name (within a Logical Tape) for a file, created as follows:

File Name Entry	Size	Repr. Code	Comments
Service Name	6	65	130.2
" "	1	65	
File Number	3	65	128.17

128.3 A subdivision of the Service ID which is used to further classify the source of data. This is a free-form (not a dictionary controlled) item.

128.6 Version number for the software which wrote the original data.

128.8 Date of generation for the software which wrote the original data. The format is 74/12/25. (Refer to comment 130.4.)

- 128.10 Representation in alphanumeric digits of maximum physical record length in decimal bytes.
- 128.12 A two-character indication of the kind of information in the file. An example of how this might be used is:
- LL Label
 - LO Log Data
 - CA Calibration
 - SE Setup
 - DE Definition
 - BL Blank File
- 128.14 File Headers, File Trailers, Tape Trailers, and Reel Trailers are identical except for the record type and the definition of these ten bytes. When unused, they will consist of ten alphanumeric space characters. The previous or succeeding file name entry is intended for disk-based implementations of LIS in which there may be no obvious predecessor or successor file. The format is the same as the file name (Comment 128.2).
- 128.17 File number represented as three alphanumeric digits: 001 to 999.

File Trailer Record (Type 129.)

File Trailer Record (Type 129.)			
Entry	Size	Repr. Code	Comment
Logical Record Header	2		0.1.1
File Name	10	65	128.2
2 blanks	2	65	
Service Sub Level Name	6	65	128.3
Version Number	8	65	128.6
Date of Generation	8	65	128.8
1 blank	1	65	
Maximum Physical Record Length	5	65	128.10
2 blanks	2	65	
File Type	2	65	128.12
2 blanks	2	65	
Optional Next File Name	10	65	128.2

The File Trailer Record is 58 bytes in length. A file trailer, if present, must be the last logical record in a file. It may be followed by a Tape Trailer (type 131.). It is used, primarily in real-time situations, to check the data without having to backspace to the beginning of the last file. File Trailer Records are always followed by EOF's.

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The EOF serves to indicate the end of file in the absence of a File Trailer Record.

Tape Header Record (Type 130.)

Tape Header Record (Type 130.)			
Entry	Size	Repr. Code	Comments
Logical Record Header	2		0.1.1
Service Name	6	65	130.2
6 blanks	6	65	
Date	8	65	130.4
2 blanks	2	65	
Origin of Data	4	65	130.6
2 blanks	2	65	
Tape Name	8	65	130.8
2 blanks	2	65	
Tape Continuation Number	2	65	130.10
2 blanks	2	65	
Previous Tape Name	8	65	130.12
2 blanks	2	65	
Comments	74	65	130.14

The Tape Header Record is 128 bytes in length, and it is the first record on any logical tape.

COMMENT

EXPLANATION

130.2 Service Name is the name of the service (or program) which created the tape. The first six characters of this name are used in all File Header and File Trailer records. In this fashion, all of the file names within a Logical Tape will be unique. The construction is to use the six-character service name and a ".", followed by a three-character counter (001, 002, ..., 999), which counts the files in a Logical Tape.

130.3 A filler character consisting of an ASCII blank.

130.4 Date when the data was originally acquired. The month is represented by alphanumeric digits, e.g., 74/12/25.

Entry	Size	Repr. Code
Year	2	65
"/"	1	65
Month	2	65
"/"	1	65
Day	2	65

130.6 The system which originally acquired or created the data.

- 130.8 An ID which can be used to identify the logical tape when applicable.
- 130.10 When multiple logical tapes are stored on the same reel, this entry may be used to number them sequentially.
- 130.12 An ID which can be used to identify the previous logical tape where applicable. If this is the first logical tape, then this entry should be all blanks. See Comment 130.8.
- 130.14 Any relevant comments concerning the logical tape or the information contained within the logical tape.

Tape Trailer Record (Type 131.)

The contents of this record are the same as the File Header Record.

Tape Trailer Record (Type 131.)			
Entry	Size	Repr. Code	Comment
Logical Record Header	2		0.1.1
Service Name	6	65	130.2
6 blanks	6	65	
Date	8	65	130.4
2 blanks	2	65	
Origin of Data	4	65	130.6
2 blanks	2	65	
Tape Name	8	65	130.8
2 blanks	2	65	
Tape Continuation Number	2	65	130.10
2 blanks	2	65	
Next Tape Name	8	65	131.2
2 blanks	2	65	
Comments	74	65	130.14

The Tape Trailer Record is 128 bytes in length. If several logical tapes are stored on one physical reel, then this type of record indicates the end of a logical tape. This record is optional. In its absence, a Logical Tape is assumed to be terminated when a new Logical Tape Header is encountered.

COMMENT EXPLANATION

- 131.2 An ID which can be used to identify the next logical tape where applicable. See Comment 130.8.

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Reel Header Record (Type 132.)

Reel Header Record (Type 132.)			
Entry	Size	Repr. Code	Comments
Logical Record Header	2		0.1.1
Service Name	6	65	130.2
6 blanks	6	65	130.3
Date	8	65	132.6
2 blanks	2	65	
Origin of Data	4	65	130.6
2 blanks	2	65	
Reel Name	8	65	132.8
2 blanks	2	65	
Reel Continuation Number	2	65	132.10
2 blanks	2	65	
Previous Reel Name	8	65	132.12
2 blanks	2	65	
Comments	74	65	132.14

The Reel Header Record is 128 bytes in length, and it is the first record on any physical reel. It is intended to identify the reel of tape.

COMMENT	EXPLANATION
132.6	The date when this physical reel was created. The date is constructed in the same format described in Comment 130.4.
132.8	An eight-character name used to physically identify a specific reel of tape. This name matches the visual identification written on the tape canister.
132.10	When multiple physical reels are needed, this entry can be used to number them sequentially. Alphanumeric digits: 1 to 99.
132.12	An ID which can be used to identify the previous physical reel where applicable.
132.14	Any relevant comments describing the physical reel of tape.

Reel Trailer Record (Type 133.)

LOG INFORMATION STANDARD

Reel Trailer Record (Type 133.)			
Entry	Size	Repr. Code	Comment
Logical Record Header	2		0.1.1
Service Name	6	65	130.2
6 blanks	6	65	
Date	8	65	132.6
2 blanks	2	65	
Origin of Data	4	65	130.6
2 blanks	2	65	
Reel Name	8	65	132.8
2 blanks	2	65	
Reel Continuation Number	2	65	132.10
2 blanks	2	65	
Next Reel Name	8	65	133.3
2 blanks	2	65	
Comments	74	65	132.14

The Reel Trailer Record is 128 bytes in length. This type of record may optionally be used as the last record on a physical reel of tape.

COMMENT EXPLANATION

133.3 An ID which can be used to identify the next physical reel, where applicable.

Comment Record (Type 232.)

Comment Record (Type 232.)			
Entry	Size	Repr. Code	Comments
Logical Header	2		0.1.1
Comment	V	65	

This type of record is used to record any desired comments. It may appear anywhere between the Reel Header Record and the final double-EOF.

SECTION 5

IMPLEMENTATION

The implementation of the LIS format may be discussed at several levels of sophistication. The subject is treated below first, in terms of the structure of the software necessary to interface between the applications level programs and the physical device on which the information is to be stored, and second, in terms of the basic rules of construction of an LIS-formatted data structure.

General Software Structure

Software to implement the LIS format may be classed into several levels. Table lists some levels the type of information from the LIS format that they do or do not know about.

LEVEL	KNOWS ABOUT	DOES NOT KNOW ABOUT
Device Handlers	The medium	The content of physical records
Physical Record Handler	Physical Record Headers and Trailers	The medium or the content of physical records beyond the header and trailer
Logical Record Handlers	Logical Record Types and Blocking Factors	Physical records
Application service routines	Constructing Frames, retrieving general information	Logical records
Applications software	Frame and other general information	LIS format

Device Handlers

Device Handlers know all about the media aspects of information storage, but virtually nothing about the information content of the data they handle. For magnetic tape, these routines know how to read, write, and in general, move tape; but the most knowledge they have of the information content will be physical size. These routines must be able to sense and relay status information about the physical devices.

Physical Record Handlers

At a more sophisticated level, with respect to information content, are the physical record handlers. These routines know about the construction or decoding of physical record headers and trailers. Proceeding toward the physical medium, information is altered only by hardware beyond these routines. Conversely, moving toward the applications software, information must be in a coherent form when it leaves this

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level. Consequently, the following operations will occur at this level:

1. Compute and check the checksum (if one is present). Set an error indicator if it is wrong.
2. Retrieve and store file number information if it is present.
3. Retrieve and store record number information if it is present.
4. Pass on error indications from the Device Handler level.

Routines at this level receive raw physical records from device handlers and pass checksum, file number, and record number information to higher level routines. In addition, these routines should pass all the information between the physical record header and trailer upward in a transparent fashion. Conversely, they should be able to receive such information and append physical record headers and trailers. In particular, physical record boundaries should be invisible at higher levels.

Logical Record Handlers

The record content handlers must be able to distinguish logical record types. By knowing the logical record types, these routines will be able to decode or construct the various logical records. It is at this level that the information content of the logical record is first examined. Routines at this level will block and unblock frames from logical data records.

Application Service Routines

The routines at this level provide direct support to the general applications software. General data handling protocol, such as opening and closing files, or logical tapes are implemented at this level. At the data level, frames are processed from external representations to internal formats.

Application Service Routines will have a multitude of entry points. The information required to understand an LIS-formatted data structure will be entered through these calls directly into table structures from which the appropriate logical records will be constructed by lower level routines. Entry points at this level will also be able to interrogate the status of data structures and logical devices.

Applications Software

The software at the applications level knows little about the LIS format other than that a minimum set of preliminary data is required. This level of program is concerned almost exclusively with information interpretation.

APPENDIX A

ASCII CODES

Character	ASCII 7-Bit*	Character	ASCII 7-Bit*	Character	ASCII 7-Bit*
Space	040	@	100		140
!	041	A	101	a	141
"	042	B	102	b	142
#	043	C	103	c	143
\$	044	D	104	d	144
%	045	E	105	e	145
&	046	F	106	f	146
'	047	G	107	g	147
(	050	H	110	h	150
)	051	I	111	i	151
*	052	J	112	j	152
+	053	K	113	k	153
,	054	L	114	l	154
-	055	M	115	m	155
.	056	N	116	n	156
/	057	O	117	o	157
0	060	P	120	p	160
1	061	Q	121	q	161
2	062	R	122	r	162
3	063	S	123	s	163
4	064	T	124	t	164
5	065	U	125	u	165
6	066	V	126	v	166
7	067	W	127	w	167
8	070	X	130	x	170
9	071	Y	131	y	171
:	072	Z	132	z	172
;	073	[	133	{	173
<	074	\	134		174
=	075	]	135	}	175
>	076		136	~	176
?	077		137	Delete	177
Horizontal Tab	011	Vertical Tab	013		
Line Feed	012	Form Feed	014	Carriage Return	015

*7-bit ASCII stored as 8-bit byte. High order bit is 0.

APPENDIX B

REPRESENTATION CODES

Code Number	Code as ASCII	Size	Comment	Format
49	1 ✓	2	B.3	16-bit Floating Point
50	2	4	B.4	32-bit Low Resolution Floating Point
56	8 ✓	1	B.9	8-bit 2's complement Integer
65	A ✓			Alphanumeric
66	B ✓	1	B.7	Byte Format
68	D ✓	4	B.2	32-bit Floating Point
70	F ✓	4	B.10	32-bit Fixed Point
73	I ✓	4	B.5	32-bit 2's complement Integer
77	M ✓		B.8	Mask
79	O ✓	2	B.6	16-bit 2's complement Integer
128			B.1	

These codes indicate the manner in which the data is represented. Note that the corresponding ASCII character has been used to identify the codes in this document, but the representation of the representation codes themselves is 66 (byte format).

B.1

If the representation code is equal to or greater than 128, it indicates the datum is a raw data block. That means that the data is a string of bytes with an unknown internal structure (as far as the LIS Format is concerned). This internal structure must be indicated external to the tape.

B.2 Code 68 (32-bit Floating Point)

Bit Number		
0	1-8	9-31
Sign	2^7-2^0	$2^{-1}-2^{-23}$
Sign (S)	Exponent (E)	Fraction (F)

Sign bit appended to the fraction yields a 24-bit Mantissa (M). If $S=0$, then the number is positive, and:

1. The mantissa is a binary fraction.
2. The exponent is expressed as excess 128.

$$\text{Value} = M \cdot 2^{E-128}$$

LOG INFORMATION STANDARD

If $S = 1$, then the number is negative and:

1. The mantissa is the two's complement of a binary fraction.
2. The exponent contains the one's complement of the normal exponent code.

$$\text{Value} = M * 2^{127-E}$$

If $M = 0$, then the entire word is set to 0.

$$\text{Value} = 0$$

$$153_{10} = 231_8 = +.462_8 \times 2^8 =$$

Bit Number		
0	1-8	9-31
0	10001000	100110010000000000000000

$$-153_{10} = -231_8 = -.462_8 \times 2^8 =$$

Bit Number		
0	1-8	9-31
1	01110111	011001110000000000000000

B.3 Code 49 (16-bit Floating Point)

-1	2^{-1}	.	.	.	.	2^{-7}	} M
2^{-8}	.	.	2^{-11}	2^3	2^2	2^1	
M				E			

$$\text{Value} = M * 2^E$$

2's complement 12-bit fractional mantissa with 4-bit unsigned integer exponent.

$$153_{10} = 231_8 = .462_8 \times 2^8 =$$

Bit Number	
0-11	12-15
010011001000	1000

$$-153_{10} = -231_8 = -.462_8 \times 2^8 =$$

Bit Number	
0-11	12-15
101100111000	1000

B.4 Code 50 (32-bit Low-Resolution Floating Point)

-2^{15}	2^{14}	.	.	.	.	.	.
.	.	.	.	.	.	.	2^0
-1	2^{-1}	.	.	.	.	.	.
.	.	.	.	.	.	.	2^{-15}

} E

} M

$$\text{Value} = M * 2^E$$

2's complement 16-bit fractional mantissa with
2's complement 16-bit integer exponent

$$153_{10} = 231_8 = .462_8 \times 2^8$$

Bit Number	
0-15	16-31
00000000000001000	0100110010000000

$$-153_{10} = -231_8 = -.462_8 \times 2^8$$

Bit Number	
0-15	16-31
0000000000000100	1011001110000000

B.5 Code 78 - 82-bit Integer

[illegible]

2's complement 32-bit integer

$$153_{10} = 231_8$$

Bit Number
0-31
000000000000000000000000010011001

LOG INFORMATION STANDARD

$$-153_{10} = -231_8$$

	Bit Number
	0-31
	11111111111111111111111101100111

B.6 Code 79 - 16-bit Integer

-2^{15}	2^{14}	.	.	.	.	.
.	.	.	.	.	.	2^0

2's complement 16-bit integer.

$$153_{10} = 231_8$$

Bit Number
0-15
0000000010011001

$$-153_{10} = -231_8$$

Bit Number
0-15
1111111101100111

B.7 Code 66 - Byte

2^7	.	.	.	.	.	.	2^0
-------	---	---	---	---	---	---	-------

Unsigned 8-bit integer.

B.8 Code 77 - Mask

1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---

Each bit position has its own meaning.

B.9 Code 56 - 8-bit Integer

-2^7	2^6	.	.	.	.	.	2^0
--------	-------	---	---	---	---	---	-------

2's complement 8-bit integer.

$$153_{10} = 231_8$$

Bit Number
0-7
01011001

$$-153_{10} = -231_8$$

10100111

B.10 Code 70 - 32-bit Fixed Point

-2^{15}	2^{14}	2^{13}	.	.	.	.	.
.	.	.	.	.	.	.	2^0
2^{-1}	2^{-2}	.	.	.	.	.	.
.	.	.	.	.	.	.	2^{-16}

2's complement with binary point in the middle

$$153.25_{10} = 231.2_8$$

Bit Number	
0-15	16-31
0000000010011001	0100000000000000

$$-153.25_{10} = -231.2_8$$

Bit Number	
0-15	16-31
1111111101100110	1100000000000000

APPENDIX C

CHANNEL MNEMONICS

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
1.1 MEV Output	NGT	11ME
150 KEV Output	NGT	150A
150 KEV Output (BIS)	NGT	150B
1.6 MEV Output	NGT	16ME
One-way travel time (surface to depth)	COMPUTED	1WAY
2 MEV Output	NGT	2ME
Two-way travel time (surface to Depth)	COMPUTED	2WAY
3 MEV Output	NGT	3ME
40 KEV Output	NGT	40KE
0.5 MEV Output	NGT	5ME
60 KEV Output	NGT	60KE
80 KEV Output	NGT	80KE
Analog 0 for PIM	PIM	A0P
Analog 10 for PIM	PIM	A10P
Analog 12 for PIM	PIM	A12P
Analog 13 for PIM	PIM	A13P
Analog 14 for PIM	PIM	A14P
Analog 1 for PIM	PIM	A1P
Analog 2 for PIM	PIM	A2P
Analog 3 for PIM	PIM	A3P
Analog 4 for PIM	PIM	A4P
Analog 5 for PIM	PIM	A5P
Analog 6 for PIM	PIM	A6P
Analog 8 for PIM	PIM	A8P
Attenuation Borehole Compensated	CBT	ABHC
Area of Bit	COMPUTED	ABS
Averaged Channel 0	HDT	AC0
Averaged Channel 1	HDT	AC1
Averaged Channel 2	HDT	AC2
Averaged Channel 3	HDT	AC3
Averaged Channel 4	HDT	AC4
Accelerometer	MISC.	ACCE
Activation Chi-Square	GSTA	ACS
Auxiliary Current	CCC	ACUR
Angular Dispersion	DM	AD

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Average Difference of Fast Dip Channels 1 and 2	HDT	AD12
Average Difference of Fast Dip Channels 2 and 3	HDT	AD23
Average Difference of Fast Dip Channels 3 and 4	HDT	AD34
Average Difference of Fast Dip Channels 4 and 1	HDT	AD41
ADC Gain Measurement	GST	ADCG
ADC Zero Measurement	GST	ADCZ
Adjusted Sonic Travel Time	WST	ADJS
Arrow Drift	DM	ADRI
Amplitude Estimate	NML	AE
Amplitude Estimate, 2nd Cycle	NML	AE2
Amplitude Estimate, 3rd Cycle	NML	AE3
Area of Future Casing	COMPUTED	AFCD
Attenuate		AFP
Adaptative Gain from Stochastic NGT Filtering	PRENGT	AGN
Arrow Position on Film	COMPUTED	AH
Acoustic Impedance	COMPUTED	AIMP
Alpha (Coefficient in Fracture Pressure Gradient Eqn.)	MECPRO	ALPH
Amplitude 1 (of Spectrum in VSP)	VSP	AM1
Amplitude from Mode 1 for Presentation	CMS	AMP1
Amplitude from Mode 2 for Presentation	CMS	AMP2
Amplitude from Mode 3 for Presentation	CMS	AMP3
Amplitude from Mode 4 for Presentation	CMS	AMP4
Amplitude from E2	SONIC	AMPL
Auxiliary Measurements Sonde	AMS	AMS
Anhydrite Facies	TYPOL	ANHY
Activated Oxygen Count Rate	GST	AOC
Area of Borehole	COMPUTED	AREA
Anhydritic Rocks	TYPOL	AROC
Apparent Salinity	SARLOG	ASAL
Apparent Sigma Water	COMPUTED	ASIG
Amplified Short Normal	MISC.	ASN
The Computed Anti-log of SP/K which equals RMF/RW	PRINCE	ASP
Attenuation Coefficient	GRFLCT	ATTE
Autocorrelation 1 (in VSP)	VSP	AU1
Average Seismic Velocity	COMPUTED	AVGV
Auxiliary Voltage	CCC	AVOL
Apparent Water Salinity	COMPUTED	AWS
Azimuth of Pad 1	DM	AZI1
Azimuth of Hole Drift	DM	AZIM
Background, Near Gates	TDT	BACK
Bad Hole Indicator	COMPUTED	BADH

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Formation Volume Factor of Gas	PVTANA	BGAS
Bond Index	COMPUTED	BI
Bond Index Level for Isolation	COMPUTED	BILI
Bituminous Rocks Facies	TYPOL	BITU
Block Shift between Shots or Knee	WST	BLSH
Formation Volume Factor of Oil	PVTANA	BOIL
Bubble Point Pressure	PVTANA	BPPR
Background Ratio for GST-A/IGT		
Background Normalization	PRESS	BRAT
Bit Size	MISC	BS
Break Time in VSP/WST	VSP	BTIM
Bulk Volume (Water) for Previous PML	INCH	BVPP
Bulk Volume (Water) in Flushed Zone	INCH	BVSX
Bulk Volume Water	COMPUTED	BVW
Bulk Volume Water for Cased Hole	INCH	BVWC
Bulk Volume Water for Production Mgmt. Log	INCH	BVWP
Formation Volume Factor of Water	PVTANA	BWAT
Counter 0 for PIM	PIM	C0P
Caliper 1 - 3	DM	C1
Counter 1 for PIM	PIM	C1P
Caliper 1 - Secondary	COMPUTED	C1S
Caliper 2 - 4	DM	C2
Counter 2 for PIM	PIM	C2P
Caliper 2 - Secondary	COMPUTED	C2S
Double R1 Radius (HDT)	DICHDT	C3
Counter 3 for PIM	PIM	C3P
Double R4 Radius (HDT)	HICHDT	C4
Caliper 2 (Second Caliper in File)	MISC.	CAL2
Caliper	MISC	CALI
Casing Number 1 Radius	COMPUTED	CAS1
Casing Number 2 Radius	COMPUTED	CAS2
Casing Number 3 Radius	COMPUTED	CAS3
Compressibility, Bulk	COMPUTED	CB
E1 Amplitude for CBL	SONIC	CBL
Casing Bond Tool Status	CBT	CBTS
Casing No. 1 Collars & Centralizers-Left Edge	COMPUTED	CC1L
Casing No. 1 Collars & Centralizers-Right Edge	COMPUTED	CC1R
Casing No. 2 Collars & Centralizers-Left Edge	COMPUTED	CC2L
Casing No. 2 Collars & Centralizers-Right Edge	COMPUTED	CC2R
Casing No. 3 Collars & Centralizers-Left Edge	COMPUTED	CC3L
Casing No. 3 Collars & Centralizers-Right Edge	COMPUTED	CC3R

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Capture Calcium	GST	CCA
Capture Chi-square from GST-A/IGT Spectral Fit	PRESS	CCHI
Capture Chlorine	GST	CCHL
CCL Amplitude	MISC.	CCL
Charge Concentration per Unit Pore Volume	DWRIG	CCPV
Correlation Curve Resistivity	DM	CCRE
Capture Chi-square	GSTA	CCS
Cable Current	NML	CCUR
C-D Diametral Shift	DM	CDDS
Computed EPT Matrix	EPT	CEM
Coal Facies	TYPOL	CFAC
Correction Factor of Deep Log	SHO	CFD
Capture Iron	GST	CFE
Correction Factor on ILD	ADI	CFID
Correction Factor on ILM	ADI	CFIM
Correction Factor on LL8	ADI	CFL8
Log of Frequency of the Cells Used for the Estimation	ESTIME	CFRQ
Correction Factor of Shallow Log	SHO	CFS
Capture Gain for GST-A/IGT Spectrum Correction	PRESS	CGAI
Compressibility of Gas	PVTANA	CGAS
Computed GR from Thorium, Uranium, & Potassium	GTPRE	CGR
Coarse-grain Sandstones	TYPOL	CGSA
Calibration Half-scale	MISC.	CH
Chi-square of FIT W.R.T. The Counts - NGT	PRENGT	CHI
Capture Hydrogen	GST	CHY
IL-Deep Conductivity	DIL/ISF	CILD
IL-Medium Conductivity	DIL/ISF	CILM
ILX Susceptibility	ILT	CILX
IRD Conductivity	DITX	CIRD
IRM Conductivity	DITX	CIRM
IXD Conductivity	DITX	CIXD
IXM Conductivity	DITX	CIXM
Course Length - Horizontal Drift of a Deviated Well	TVDCPI	CL
Claystone Facies	TYPOL	CLAY
Cluster/Expansion	DM	CLEX
LL8 Conductivity	DIL/ISF	CLL8
Conductivity Laterolog Deep	DLTB	CLLD
Closure	DM	CLOS
Cluster Index from PARSEL Pass 1	COMPUTED	CLU1
Cluster Index from PARSEL Pass 2	COMPUTED	CLU2

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
MLL Conductivity	PROX/MLL	CMLL
MSFL Conductivity	MSFL	CMSF
Capture Offset for GST-A/IGT Spectrum Correction	PRESS	COFF
Compressibility of Oil	PVTANA	COIL
Conglomerate Facies	TYPOL	CONG
C/O Ratio	GST	COR
Corrected Time Tics (WST)	COMPUTED	CORT
Compressor Pressure	WSTLIS	CPRE
PROX Conductivity	PROX/MLL	CPRO
Caliper Plus(12) Volts Output	LDT	CPVO
Combined Quality	DM	CQ
Clayey Rocks	TYPOL	CROC
Cable Speed	MISC.	CS
Calibration Source Count Rate	GST	CSCR
SFL Conductivity	DIL/ISF	CSFL
Capture Silicon	GST	CSI
Dead Time Corrected Sigma	GSTA	CSIG
Cable Speed	COMPUTED	CSPE
Capture Sulphur from GST-A/IGT Spectral Fit	PRESS	CSUL
Dead Time Corrected Tau	GSTA	CTAU
Chart No. Used for TDT-K to Determine TPHI	PRINCE	CTDT
Cartridge Temperature	MISC.	CTEM
Cable Velocity (up positive)	COMPUTED	CVEL
Cumulated Volume from Porosity to Special Mineral 1	GLOBAL	CVP1
Cumulated Volume from Porosity to Special Mineral 2	GLOBAL	CVP2
Cumulated Volumes from PHI to Third Special Mineral	DWRIG	CVP3
Cumulated Volume from Porosity to Dolomite	GLOBAL	CVPD
Cumulated Volume from Porosity to Limestone	GLOBAL	CVPL
Cumulated Volume Porosity plus Volume Sand	GLOBAL	CVPS
Conductivity of Water, Apparent	PRINCE	CWA
Conductivity of Water, Apparent at Std. Temp (75 F)	PARSEL	CWAS
Compressibility of Water	PVTANA	CWAT
Cond. Water Apparent Uncorrected	DWS	CWAU
Caliper Zero	LDT	CZ
Caliper Zero Volts Output	LDT	CZVO
Downhole 1 for VSP/WST	VSP	D1
Difference of NFC1 AND NFC2	HDT	D12
Downhole 1 Stack for VSP/WST	VSP	D1S

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Difference of NFC2 and NFC3	HDT	D23
Difference of NFC3 and NFC4	HDT	D34
Difference of NFC4 and NFC1	HDT	D41
Dip Azimuth	DM	DA
Depth Adjustment Curve for Lapcur	LAPCUR	DAC
Deep Bucking Current Attenuation	DLT	DBCA
Distance to Barycenter of Lithofacies	TYPOL	DBLI
Differential Caliper	MISC.	DCAL
Digital Data In (Setting)	PAT	DDI
Difference Between DT and RDT1 Channels	MECPRO	DDT
Channel Name		DEPT
Deviation	DM	DEVI
Data File ID	WSTLIS	DFI
Density Grain (MIN-1, MIN-2)	LDT	DG12
Density Grain (MIN-1, MIN-3)	LDT	DG13
Density Grain (MIN-2, MIN-3)	LDT	DG23
Diameter of Invasion	COMPUTED	DI
Deep Current (35 Hz) 0 Deg	DLT	DI0
Deep Current (35 Hz) 90 Deg	DLT	DI90
Difference in Depth Encoder Depths	DTT	DIFF
Dip Value	COMPUTED	DIP
Disconformity Facies	TYPOL	DISC
Dolomitic Limestone Facies	TYPOL	DLIM
Delta Mark	MISC.	DMAR
ILD/ILM Ratio	DIL/ISF	DMRA
Downhole Motor Volts	RFT	DMV
Differential Non Linearity Number of GST-A/IGT ADC's	PRESS	DNLN
Dolomite Facies	TYPOL	DOLO
Hole Dip (apparent dip)	DM	DPAP
Dip Azimuth	DM	DPAZ
Dip Bearing	DM	DPBG
Differential Pressure Channel	DIFLOW	DPCH
Density Porosity	FDC	DPHI
Delta Pressure for Invading Fluids	MECPRO	DPRI
Delta Pressure for Noninvading Fluids	MECPRO	DPRN
Dip Magnitude (true dip)	DM	DPTR
Data Quality Curve for LAPCUR	LAPCUR	DQC
Density R0	COMPUTED	DR0
Bulk Density Correction	FDC	DRHO
Primary Bulk Density Correction	LDT	DRHP
Drift curve (WST)	COMPUTED	DRIF

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Down Speed of Cable Pass Number 1	PEPL	DS01
Down Speed of Cable Pass Number 2	PEPL	DS02
Down Speed of Cable Pass Number 3	PEPL	DS03
Down Speed of Cable Pass Number 4	PEPL	DS04
Down Speed of Cable Pass Number 5	PEPL	DS05
Down Speed of Cable Pass Number 6	PEPL	DS06
Down Speed of Cable Pass Number 7	PEPL	DS07
Down Speed of Cable Pass Number 8	PEPL	DS08
Down Speed of Cable Pass Number 9	PEPL	DS09
Down Speed of Cable Pass Number 10	PEPL	DS10
Down Speed of Cable Pass Number 11	PEPL	DS11
Down Speed of Cable Pass Number 12	PEPL	DS12
Down Speed of Cable Pass Number 13	PEPL	DS13
Down Speed of Cable Pass Number 14	PEPL	DS14
Down Speed of Cable Pass Number 15	PEPL	DS15
Delta Sigma for TDT Acid Effect	COMPUTED	DSIG
Delta-SP	MISC.	DSP
Depth from DSRD	COMPUTED	DSRD
Downhole Status Word	MISC.	DSW
Delta-T	SONIC	DT
Differential Temperature	PL	DTEM
Delta-T Grain from X-plot Porosity	COMPUTED	DTGX
Delta-T Input	COMPUTED	DTIN
Delta-T Long Spacing	SONIC	DTL
DT in Normal Pressure Shales	PORPRS	DTNP
Delta-T Shear Wave Travel Time Reconstructed	MECPRO	DTSR
Delta-T on Time Measure	COMPUTED	DTTM
Dummy	MISC.	DUM2
Dummy	MISC.	DUMM
Deep Voltage (35 Hz) 0 Deg	DLT	DV0
Groningen Voltage	DLT	DV1
Deep Voltage (35 Hz) 90 Deg	DLT	DV90
EPT Attenuation Gain	EPT	EAG
EPT Attenuation of Mud Filtrate	GLOBAL	EAMF
EPT Attenuation Theoretical Value	GLOBAL	EATH
Measure of EAT Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	EATN
Measure of EAT Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	EATP
EPT Attenuation	EPT	EATT
Eddy Currents, Enhanced	PAT	ECEN
Eddy Current, Lower Array	PAT	ECLA
Eddy Current, Upper Array	PAT	ECUA

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Expected Grain Density	LDT	EGD
Elevation (Source)	WSTLIS	ELEV
EPT Lossless Propagation Time	EPT	ELPT
EPT Matrix Corrected Porosity	COMPUTED	EMCP
Emex Scale	DM	EMEX
Epithermal Neutron Porosity	CNT	ENPH
Epithermal Neutron Ratio	CNT	ENRA
Envelope	NML	ENV
Envelope, 2nd Cycle	NML	ENV2
Envelope, 3rd Cycle	NML	ENV3
EPT porosity	EPT	EPHI
Electromagnetic Propagation Resistivity	EPT	EPR
Epithermal Ratio	CNT	ERAT
EPT Resistivity of Fluid (Apparent)	COMPUTED	ERFA
Epithermal Remote Neutron Porosity	CNT	ERNP
Epithermal Remote Ratio	CNT	ERRA
Effective Radial Stress	MECPRO	ESRA
Effective Tangential Stress	MECPRO	ESTA
EPT Flushed Zone Water Saturation	DWQL	ESXO
Elapsed Time	RFT	ETIM
Emex Voltage	CCC	EVOL
East West Drift Component	TVDCPI	EWDR
Far 1st Gate	TDT	F1
Far 10th Gate	TDT	F10
Far 11th Gate	TDT	F11
Far 12th Gate	TDT	F12
Far 13th Gate	TDT	F13
Far 14th Gate	TDT	F14
Far 15th Gate	TDT	F15
Far 16th Gate	TDT	F16
Far Detector Gate 1 Count Rate	TDT	F1TD
Far 2nd Gate	TDT	F2
Far Detector Gate 2 Count Rate	TDT	F2TD
Far 3rd Gate	TDT	F3
Far Detector Gate 3 Count Rate	TDT	F3TD
Far 4th Gate	TDT	F4
Far 5th Gate	TDT	F5
Far 6th Gate	TDT	F6
Far 7th Gate	TDT	F7
Far 8th Gate	TDT	F8
Far 9th Gate	TDT	F9

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Far Background	TDT	FBAC
Flag for Bad Hole	COMPUTED	FBH
Focussed Conductivity	MISC.	FC
Fast Channel 0	DM	FC0
Fast Channel 1	DM	FC1
Fast Channel 2	DM	FC2
Fast Channel 3	DM	FC3
Fast Channel 4	DM	FC4
Flowmeter Calibration Intercept Down	PEPL	FCID
Flowmeter Calibration Intercept Up	PEPL	FCIU
Far CNL Detector Counts	CNL	FCNL
Flag for Coal	INCH	FCOA
Fitting Coefficient of Potassium - NGT	GLOBAL	FCP
Flowmeter Calibration Slope for Down Line	PEPL	FCSO
Flowmeter Calibration Slope for Up Line	PEPL	FCSU
Fitting Coefficient of Thorium	GLOBAL	FCT
Flowmeter Down Pass Number 1	PEPL	FD01
Flowmeter Down Pass Number 02	PEPL	FD02
Flowmeter Down Pass Number 03	PEPL	FD03
Flowmeter Down Pass Number 04	PEPL	FD04
Flowmeter Down Pass Number 05	PEPL	FD05
Flowmeter Down Pass Number 06	PEPL	FD06
Flowmeter Down Pass Number 07	PEPL	FD07
Flowmeter Down Pass Number 08	PEPL	FD08
Flowmeter Down Pass Number 09	PEPL	FD09
Flowmeter Down Pass Number 10	PEPL	FD10
Flowmeter Down Pass Number 11	PEPL	FD11
Flowmeter Down Pass Number 12	PEPL	FD12
Flowmeter Down Pass Number 13	PEPL	FD13
Flowmeter Down Pass Number 14	PEPL	FD14
Flowmeter Down Pass Number 15	PEPL	FD15
Far Epithermal CNL Counts	CNT	FECN
Far Electrode Potential	DM	FEP
Far Electrode Potential 1	DM	FEP1
Far Electrode Potential 2	DM	FEP2
Formation Factor Deep	COMPUTED	FFD
Far FDC Count Rate	FDC	FFDC
Estimate of FFI, 1st Cycle	NMTC	FFE1
Estimate of FFI, 2nd Cycle	NMTC	FFE2
Estimate of FFI, 3rd Cycle	NMTC	FFE3

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Free Fluid Index	NMTC	FFI
FFI Estimate A	NMTC	FFIA
FFI Estimate B	NMTC	FFIB
Form Factor for Long Spacing	LDT	FFLS
Formation Factor plot	COMPUTED	FFP
Formation Factor Shallow	COMPUTED	FFS
Formation Factor for Short Spacing	LDT	FFSS
Flag for Gas	COMPUTED	FGAS
Fine-Grain Sandstones	TYPOL	FGSA
Fractional Part of HP Gauge Pressure	PL	FHPG
Flag for Hydrocarbon	COMPUTED	FHYD
Flux Leakage, Enhanced	PAT	FLEN
Flux Leakage, Lower Array	PAT	FLLA
Frequency for Long Spacing Control Loop	LDT	FLS
Flux Leakage, Upper Array	PAT	FLUA
Force Exerted by Cable on Logging Head	DFE	FORC
Free Porosity Estimate, 1st Cycle	NMTC	FPE1
Free Porosity Estimate, 2nd Cycle	NMTC	FPE2
Free Porosity Estimate, 3rd Cycle	NMTC	FPE3
Fracture Pressure Gradient for an Invading Fluid	COMPUTED	FPGI
Fracture Pressure Gradient for Non-invading Fluids	COMPUTED	FPGN
Free Porosity A	NMTC	FPHA
Free Porosity B	NMTC	FPHB
Free Porosity	NML	FPHI
Flag for Phimax	COMPUTED	FPMA
Far Quotient($F1/2 \cdot F2$)	TDT	FQ
Focussed Resistivity	MISC.	FR
Flow Regime Indicator	PVTANA	FREG
Flag for Shale	COMPUTED	FSHA
Far Sigma (Neutron Capture Cross Section)	TDT	FSIG
Far Signal Level	EPT	FSL
Frequency of Short Spacing Control Loop	LDT	FSS
Flag for SWB	COMPUTED	FSWB
Far Thermal Neutron Decay Time	TDT	FTAU
Far Thermal CNL Counts	CNT	FTCN
Far TDTM Count Rate	TDT	FTDT
Fluid Temperature	DFE	FTEM

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Flowmeter Up Pass Number 1	PEPL	FU01
Flowmeter Up Pass Number 02	PEPL	FU02
Flowmeter Up Pass Number 03	PEPL	FU03
Flowmeter Up Pass Number 04	PEPL	FU04
Flowmeter Up Pass Number 05	PEPL	FU05
Flowmeter Up Pass Number 06	PEPL	FU06
Flowmeter Up Pass Number 07	PEPL	FU07
Flowmeter Up Pass Number 08	PEPL	FU08
Flowmeter Up Pass Number 09	PEPL	FU09
Flowmeter Up Pass Number 10	PEPL	FU10
Flowmeter Up Pass Number 11	PEPL	FU11
Flowmeter Up Pass Number 12	PEPL	FU12
Flowmeter Up Pass Number 13	PEPL	FU13
Flowmeter Up Pass Number 14	PEPL	FU14
Flowmeter Up Pass Number 15	PEPL	FU15
Far Voltage Down	EPT	FVD
Far Voltage Reference	EPT	FVR
Flag for Volume of Shale	COMPUTED	FVSH
Flag for Volume of Shale		
Method Used by Inch	INCH	FVSI
Fractional Volume of Tar	TAR	FVT
Far voltage up	EPT	FVU
Fractional Weight of Dry Clay	TAR	FWDC
Fractional Weight of Sand	TAR	FWSA
Fractional Weight of Silt	TAR	FWSI
Fractional Weight of Dry Solid Materials	TAR	FWSM
Fractional Weight of Tar	TAR	FWT
Fractional Weight of Total Water	TAR	FWTW
Shear Modulus	MECPRO	G
Gap Zones	TYPOL	GAP
Gas Correction	COMPUTED	GASC
Gas-Bearing Sandstones	TYPOL	GBSA
Gain Correction Factor	GSTA	GCF
GD Shale Index	LDT	GDSI
Gas Gravity (or Density)	PVTANA	GGRA
Gas Index	COMPUTED	GI
Glauconitic Rocks	TYPOL	GLAU
Gain Latch Setting	GST	GLSE
Gas/Liquid Superficial Tension	PVTANA	GLST
Gas/Oil Superficial Tension	PVTANA	GOST

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Gravel Pack Flag, Gas	PELOG	GPFG
Gravel Pack Flag, Oil	PELOG	GPFO
Gravel Pack Flag, Water	PELOG	GPFW
Gravel Pack Channel for Left Side of Well	SKETCH	GPLS
Gravel Pack Channel for Right Side of Well	SKETCH	GPRS
Gamma Ray	MISC.	GR
Gradiomanometer Pass Number 1	PEPL	GR01
Gradiomanometer Pass Number 02	PEPL	GR02
Gradiomanometer Pass Number 03	PEPL	GR03
Gradiomanometer Pass Number 04	PEPL	GR04
Gradiomanometer Pass Number 05	PEPL	GR05
Gradiomanometer Pass Number 06	PEPL	GR06
Gradiomanometer Pass Number 07	PEPL	GR07
Gradiomanometer Pass Number 08	PEPL	GR08
Gradiomanometer Pass Number 09	PEPL	GR09
Gradiomanometer Pass Number 10	PEPL	GR10
Gradiomanometer Pass Number 11	PEPL	GR11
Gradiomanometer Pass Number 12	PEPL	GR12
Gradiomanometer Pass Number 13	PEPL	GR13
Gradiomanometer Pass Number 14	PEPL	GR14
Gradiomanometer Pass Number 15	PEPL	GR15
Gradiomanometer, Corrected	COMPUTED	GRHC
Gradio Density	PL	GRHO
Gamma Ray (SGT-N)	PL	GRSG
GR Shale Index	COMPUTED	GRSI
Gamma Ray (TET-D)	PL	GRTE
Gas-bearing Sandstones	TYPOL	GSAN
Gamma Spectroscopy Constant Summary	GST	GSCS
Gamma Spectroscopy Energy Resolution	GST	GSER
Gates Scaling Factor	TDT	GSF
Gamma Spectroscopy Head Voltage	GST	GSHV
Gamma Spectroscopy Measure Point	GST	GSMP
Gamma Spectroscopy PROM Program	GST	GSPP
Gamma Spectroscopy Tool Status	GST	GSTS
Geothermal Temperature	ITPLOG	GTEM
GSTA Tau Quality Factor	GSTA	GTQ
Gas Viscosity	PVTANA	GVIS
Gas/Water Superficial Tension	PVTANA	GWST

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Gypsum Facies	TYPOL	GYPS
HDT Average Bedding Thickness	HSLOG	HABT
HDT Average Event Thickness	HSLOG	HAET
Hole Azimuth	HDT	HAZI
Hydrogen Centroid for GST-A/IGT Spectrum Calibration	PRESS	HCEN
Hole Diameter	MISC.	HD
Hole Deviation Azimuth	DM	HDA
Hole Deviation	DM	HDEV
Horner Gas Slope	RFT	HGS
Deviation Azimuth	DM	HLAZ
HDT Likeness	HSLOG	HLIK
Hewlett Packard Frequency	HPA	HPF
HP Gauge Digital Pressure	RFT/HPA	HPGD
HP Gauge Input Frequency	RFT	HPGI
HP Gauge Pressure	PL	HPGP
HDT Planarity	HSLOG	HPLA
HDT Resistivity Asymmetry	HSLOG	HRA
HDT Resistivity	HSLOG	HRES
Hydrocarbon Resistivity Index	COMPUTED	HRI
Hole Rugosity	PARSEL	HRUG
HDT Resistivity Variance	HSLOG	HRV
Hundreds SGP Digit (Display)	RFT	HSGP
Hydro Static Head at Shear Failure for Invading Fluids	MECPRO	HSHI
Hydro Static Head at Shear Failure for Non-invading Fluids	MECPRO	HSHN
Horner Slope	RFT	HSLO
HDT Status	DM	HSTA
Displacement 1 - 2	DM	HT12
Displacement 1 - 3	DM	HT13
Displacement 2 - 3	DM	HT23
Displacement 2 - 4	DM	HT24
Displacement 3 - 4	DM	HT34
Displacement 4 - 1	DM	HT41
Head Tension	AMS	HTEN
Horner Time Function	RFT	HTF
Head Voltage	MISC.	HV
Hydrocarbon Volume	COMPUTED	HVOL
Head Voltage for TDTM	TDTM	HVTD

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Hydrocarbon Weight	COMPUTED	HWT
II Conductivity	MSFL	II
Inelastic Activation	PRESS	IAC
Inelastic Carbon	GST	IC
Inelastic/Capture Mode 1		
Ratio from GST-A/IGT Spectrum	PRESS	ICIR
Inelastic Calcium	GST	ICA
Inelastic Chi-Square from		
GST-A/IGT Spectral Fit	PRESS	ICHI
Inelastic Chlorine Weight from		
GST-A/IGT Spectrum	PRESS	ICHL
Inelastic Chi-square	GSTA	ICS
Inelastic Carbon Windows Count Rate	GST	ICWC
Inelastic Iron Weight from		
GST-A/IGT Spectrum	PRESS	IFE
Inelastic Gain for GST-A/IGT		
Spectrum Correction	PRESS	IGAI
Igneous Rocks Facies	TYPOL	IGNE
Integrated Gradiomanometer	PLIEDI	IGRH
Integrated Hydrocarbon for Cased Hole	INCH	IHC
Integral Part of HP Gauge Pressure	PL	IHPG
Integrated Hydrocarbon - Thickness	COMPUTED	IHT
Integrated Hydrocarbon	COMPUTED	IHY
Iron Indicator Ratio	GST	IIR
Integrated Permeability to Gas	PELOG	IKG
Integrated Permeability to		
Hydrocarbon	INCH	IKH
Integrated Permeability		
Index Rounded	INCH	IKIR
Integrated Permeability Minimum	INCH	IKM
Integrated Permeability to Oil	PELOG	IKO
Integrated Permeability to Water	INCH	IKW
Induction Log	MISC.	IL
IL-Deep Resistivity	DIL/ISF	ILD
ILD Error Correction	ADI	ILDE
Measure of ILD Minus		
SQRT (SIGMA**2+TAU**2)	GLOBAL	ILDN
Measure of ILD Plus		
SQRT (SIGMA**2+TAU**2)	GLOBAL	ILDN
ILD Rectangular Log	ADI	ILDR

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Inelastic Lithology		
Indicator Ratio	GST	ILIR
IL-Medium Resistivity	DIL/ISF	ILM
ILM Error Correction	ADI	ILME
MEASURE OF ILM Minus		
SQRT (SIGMA**2+TAU**2)	GLOBAL	ILMN
MEASURE OF ILM Plus		
SQRT (SIGMA**2+TAU**2)	GLOBAL	ILMP
ILM Rectangular Log	ADI	ILMR
ILX Resistivity	ILT	ILX
Integrated Movable Hydrocarbons	COMPUTED	IMHY
Indurated Shales Facies	TYPOL	INDU
Interval Transit Time	SDIC	INTT
Average Velocity Between Time Intervals	GRFLCT	INTV
Inelastic Oxygen	GST	IO
Inelastic Offset for GST-A/IGT Spectrum	PRESS	IOFF
Inelastic Oxygen Windows Count Rate	GST	IOWC
IDP Resistivity	DITX	IPD
Integration Pips	COMPUTED	IPIP
Integrated Porosity - Thickness	COMPUTED	IPT
Integrated Flow Rate of Gas	PELOG	IQG
Integrated Flow Rate of Oil	PELOG	IQO
IRD Resistivity	DITX	IRD
IRM Resistivity	DITX	IRM
Initial Shear Strength	MECPRO	ISHE
Inelastic Silicon	GST	ISI
Integrated Transit Time	SONIC	ITT
IXD Resistivity	DITX	IXD
IXM Resistivity	DITX	IXM
Adjusted Knee Drift Curve		
After Manual Mode	GADJST	KDRF
Permeability from E4 Chart	COMPUTED	KE4
TDTM->TDTK Far Gate1 Count rate	TDTM	KF1T
TDTM->TDTK Far Gate2 Count rate	TDTM	KF2T
TDTM->TDTK Far Gate3 Count rate	TDTM	KF3T
Permeability to Gas	COMPUTED	KGAS
Permeability to Hydrocarbon	INCH	KHYD
Permeability, Intrinsic	PELOG	KINT
Perm Index (KI) Rounded Off		
in Significant Figures	SARLOG	KIR

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
TDTM->TDTK Near Gate1 Count rate	TDTM	KN1T
TDTM->TDTK Near Gate2 Count rate	TDTM	KN2T
TDTM->TDTK Near Gate3 Count rate	TDTM	KN3T
Drift Knee (WST)	COMPUTED	KNEE
Permeability from NML	COMPUTED	KNML
TDTM->TDTK Near Quality Factor	TDTM	KNQ
Permeability to Oil	COMPUTED	KOIL
Permeability (from PERM Program)	COMPUTED	KPRM
Knobly Rocks	TYPOL	KROC
TDTM->TDTK Capture Cross-Section	TDTM	KSIG
TDTM->TDTK Neutron Decay Time Constant	TDTM	KTAU
Permeability (from Timur)	COMPUTED	KTMR
TDTM->TDTK Near/Far Ratio	TDTM	KTRA
TDTM->TDTK Uncorrected F.Gate 1 Count Rate	TDTM	KUF1
TDTM->TDTK Uncorrected N.Gate 1 Count Rate	TDTM	KUN1
Permeability to Water	COMPUTED	KWTR
Level 1 Data for VSP/WST	VSP	L1
Large Arm	MISC.	LA
Lateral	MISC.	LAT
Local Computation 1	COMPUTED	LC01
Local Computation 2	COMPUTED	LC02
Local Computation 3	COMPUTED	LC03
Local Computation 4	COMPUTED	LC04
Local Computation 5	COMPUTED	LC05
Local Computation 6	COMPUTED	LC06
Local Computation 7	COMPUTED	LC07
Local Computation 8	COMPUTED	LC08
Local Computation 9	COMPUTED	LC09
Local Computation 10	COMPUEDT	LC10
Local Computation 11	COMPUTED	LC11
Local Computation 12	COMPUTED	LC12
Local Computation 13	COMPUTED	LC13
Local Computation 14	COMPUTED	LC14
Local Computation 15	COMPUTED	LC15
Local Computation 16	COMPUTED	LC16
Local Computation 17	COMPUTED	LC17
Local Computation 18	COMPUTED	LC18
Local Computation 19	COMPUTED	LC19

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Local Computation 20	COMPUTED	LC20
Local Computation 21	COMPUTED	LC21
Local Computation 22	COMPUTED	LC22
Local Computation 23	COMPUTED	LC23
Local Computation 24	COMPUTED	LC24
Lump Cutoff Flag	COMPUTED	LCF
Lower Ejector Indicator	COMPUTED	LEI
Larmor Frequency	NMTC	LFRE
Likeness Curve Quadrant 1 Frame-to-Frame	CMTA	LIK1
Likeness Curve Quadrant 2 Frame-to-Frame	CMTA	LIK2
Likeness Curve Quadrant 3 Frame-to-Frame	CMTA	LIK3
Likeness Curve Quadrant 4 Frame-to-Frame	CMTA	LIK4
Limestone Facies	TYPOL	LIME
Lithology Indicator Ratio	GST	LIR
Litholog Window Count Rate	LDT	LITH
Lithofacies Permeability	TYPOL	LK
Likeness Curve Comparing Quadrants 1 and 2	CMTA	LK12
Likeness Curve Comparing Quadrants 2 and 3	CMTA	LK23
Likeness Curve Comparing WF's Quadrants 3 and 4	CMTA	LK34
Likeness Curve Comparing WF's Quadrants 4 and 1	CMTA	LK41
Maximum Likeness	DM	LKMX
Long Lower Window Count Rate	LDT	LL
Measure of LL7 Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL7N
Measure of LL7 Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL7P
Latero-Log 8	MISC	LL8
LL8-Averaged over 2.5 Feet	DIL/ISF	LL8A
LL8 Error Correction	ADI	LL8E
Measure of LL8 Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL8N
Measure of LL8 Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL8P

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
LL8 Rectangular Log	ADI	LL8R
LL8-Unaveraged	DIL/ISF	LL8U
Latero-Log Deep Resistivity	DLL	LLD
Latero-Log Deep Error Correction	SHO	LLDE
Measure of LLD Minus SQRT(SIGMA**2+TAU**2)	GLOBAL	LLDN
Measure of LLD Plus SQRT(SIGMA**2+TAU**2)	GLOBAL	LLDP
LLD Rectangular Log	SHO	LLDR
Latero-Log Groningen (Resistivity)	DLL	LLG
Latero-Log Shallow (Resistivity)	DLL	LLS
Latero-Log Shallow Error Correction	SHO	LLSE
Measure of LLS Minus SQRT(SIGMA**2+TAU**2)	GLOBAL	LLSN
Measure of LLS Plus SQRT(SIGMA**2+TAU**2)	GLOBAL	LLSP
LLS Rectangular Log	SHO	LLSR
Long Normal	MISC.	LN
Lithofacies Number	TYPOL	LNUM
Lithofacies Porosity	TYPOL	LPHI
Liquid Density	PVTANA	LRHO
Long Spacing Computed Count Rate (LL+LU/2)	LDT	LS
Lower Sample Open Valve 2 Signal	RFT	LSAM
Long Spacing High Voltage Output	LDT	LSHV
Long Spacing RHOB (Uncorrected)	LDT	LSRH
Long Upper 1-2 Window Count Rate (LU1+LU2)	LDT	LU
Long Upper 1 Window Count Rate	LDT	LU1
Long Upper 2 Window Count Rate	LDT	LU2
Long Upper RHOB	LDT	LURH
Liquid Viscosity	PVTANA	LVIS
Magnetic Mark Detector Depth	MISC.	MARK
Main Current(AC)	CCC	MCUR
Measured Depth - TVD	TVDCPI	MD
Measured Depth along Borehole	TVD	MDEP
Matrix Density in 2 Mineral Model	LDTQ	MDM2
Measured Depth Pips	COMPUTED	MDP
Micro-Focussed Resistivity	MISC.	MFR
Mill Grade Feed Flag (1.= Feed Grade, 0.= Not Feed Grade)	TAR	MGFF

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Multi-gain Waveform 1	SDC	MGW1
Multi-gain Waveform 2	SDC	MGW2
Multi-gain Waveform 3	SDC	MGW3
Multi-gain Waveform 4	SDC	MGW4
Matrix ID "M"	COMPUTED	MIDM
Matrix ID "N"	COMPUTED	MIDN
Micro-Inverse Resistivity	MISC.	MINV
Massive Limestones Facies	TYPOL	MLIM
MLL Resistivity	PROX/MLL	MLL
Measure of MLL Minus SQRT(SIGMA**2+TAU**2)	GLOBAL	MLLN
Measure of MLL Plus SQRT(SIGMA**2+TAU**2)	GLOBAL	MLLP
Miscellaneous Neutron	MISC.	MNEU
Micro-Normal Resistivity	MISC.	MNOR
Monitor	MISC.	MON
Moveable Oil Plot Flag for Quality	COMPUTED	MOPF
Manometer Pressure	PL	MP
Mineral (3) Proportion MIN-1	LDT	MP1
Mineral Proportion MIN-2	LDT	MP2
Mineral Proportion MIN-3	LDT	MP3
Mineral (3) Proportion Calcium	LDT	MPC
Mineral Proportion Dolomite	LDT	MPD
Mineral Proportion Quartz	LDT	MPQ
Mud Resistivity	AMS	MRES
Mixture Rho	PLIEDI	MRHO
Minitron Status and Voltage	GST	MSAV
MSFL Corrected for Borehole Effect	SRT	MSFC
MSFL Resistivity	MSFL	MSFL
Measure of MSF Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	MSFN
Measure of MSF Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	MSFP
M (=1000) SGP Digit (Display)	RFT	MSGP
Minimum Shale Index	COMPUTED	MSI
Motor Speed	RFT	MSPE
Mud Temperature	AMS	MTEM
Miscellaneous Time Gate	MISC.	MTG
Multiple Reflection Coefficient (Multiple + Primary)	GMULTP	MULT

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Multiple Reflection Coefficient		
Only (Multiple - Primary)	GMULTP	MUON
Main Voltage	CCC	MVOL
Near 1st Gate	TDT	N1
Near 10th Gate	TDT	N10
Near 11th Gate	TDT	N11
Near 12th Gate	TDT	N12
Near 13th Gate	TDT	N13
Near 14th Gate	TDT	N14
Near 15th Gate	TDT	N15
Near 16th Gate	TDT	N16
Near Detector Gate 1 Count Rate	TDT	N1TD
Near 2nd Gate	TDT	N2
Near Detector Gate 2 Count Rate	TDT	N2TD
Near 3rd Gate	TDT	N3
Near Detector Gate 3 Count Rate	TDT	N3TD
Near 4th Gate	TDT	N4
Near 5th Gate	TDT	N5
Near 6th Gate	TDT	N6
Near 7th Gate	TDT	N7
Near 8th Gate	TDT	N8
Near 9th Gate	TDT	N9
Normalized Averaged Channel 1	HDT	NAC1
Normalized Averaged Channel 2	HDT	NAC2
Normalized Averaged Channel 3	HDT	NAC3
Normalized Averaged Channel 4	HDT	NAC4
Near Detector Counts	CNL	NCNL
Net Count Rate from Spectrum A	GST	NCRA
Neutron Depth Log	NDT	NDL
Neutron Density Porosity Difference	COMPUTED	NDPD
Near Epithermal CNL Counts	CNT	NECN
Neutron	GNT	NEUT
Normalized Fast Dip Channel 1	HDT	NFC1
Normalized Fast Dip Channel 2	HDT	NFC2
Normalized Fast Dip Channel 3	HDT	NFC3
Normalized Fast Dip Channel 4	HDT	NFC4
Near FDC Count Rate	FDC	NFDC
NML Free Porosity	NML	NFP
Negative Noise Sonic Amplitude	CMS	NNOI
Noise	SONIC	NOIS

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Number of Vectors	DM	NOV
Nullified Pad	DM	NP
New Power Deep	DLT	NPD
Neutron Porosity	CNL	NPHI
Number of Pooled Levels	DM	NPLV
NML Pulse Number	NMTC	NPN
New Power Shallow	DLT	NPS
Neutron Shale Index	COMPUTED	NPSI
Near Quotient ($N1/2 \cdot N2$)	TDT	NQ
Neutron R0	CNL	NR0
Neutro Ratio (ND/FD)	CNL	NRAT
Negative Sonic Amplitude for Mode 1	CMS	NSA1
Negative Sonic Amplitude for Mode 2	CMS	NSA2
Negative Sonic Amplitude for Mode 3	CMS	NSA3
Negative Sonic Amplitude for Mode 4	CMS	NSA4
North South Drift	TVDCPI	NSDR
Number, Sequence	LDT	NSEQ
Near Signal Level	EPT	NSL
NML T1 Relaxation Time	NMTC	NT1
Near Thermal CNL Counts	CNT	NTCN
Near TDTM Count Rate	TDT	NTDT
Near Voltage Down	EPT	NVD
Near Voltage Reference	EPT	NVR
Near Voltage Up	EPT	NVU
Offset Azimuth (Source)	WSTLIS	OAZI
Offset Distance from Well (Source)	WSTLIS	ODFW
Orthogonal Drift	COMPUTED	ODRI
One's Digit of HP Gauge Pressure	HPA	OHPG
Oil/Liquid Fraction	PVTANA	OLF
Occurence in the Multi-Dimension Histogram	FDET	OMDH
Overburden Pressure Gradient	MECPRO	OPG
Oil Density	PVTANA	ORHO
Original Shale Flag (Before L and W Logic)	SARLOG	OSF
One's SGP Digit (Display)	RFT	OSGP
Oil Viscosity	PVTANA	OVIS
Original X0 Flag (Flag		
Showing Modifications of SX0)	SARLOG	OXF
Phase 1 (of Spectrum in VSP)	VSP	P1
Pad 1 Azimuth	HDT	PIAZ
Parity Failures	LDT	PARI

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Participation	DM	PART
Projection of the Logs onto the Principal Axes	PROJEC	PCLG
Core Equivalent Porosity Perm	COMPUTED	PCOR
Power Deep	DLT	PD
Pressure Digit 10,000's	RFT	PD10
Pressure Digit 20,000's	RFT	PD20
Porosity Difference	CNT	PDIF
Fitting Coefficient of EPT Attenuation	GLOBAL	PEAT
Porosity EPT Dolomite	PRESS	PEDO
Photo-Electric Factor	LDT	PEF
Porosity EPT Limestone	PRESS	PELI
Permeability from Coriband	COMPUTED	PERC
Perforation Flag	MISC.	PERF
Porosity EPT Sandstone	PRESS	PESA
Pressure Fraction	RFT	PFRA
Power, Groningen	DLT	PG
Pressure Gradient	PVTANA	PGRA
Apparent Total Porosity	COMPUTED	PHIA
Porosity Occupied by Bound Waters	DWS	PHIB
TDT Count Rate Porosity	COMPUTED	PHIC
Effective Porosity	COMPUTED	PHIE
PHIT Flag Indicating Method Used for Computation	PRINCE	PHIF
Porosity from TDT-K	TDT	PHIK
Porosity Derived from True Resistivity	COMPUTED	PHIR
Total Porosity Corrected for Hydrocarbon	COMPUTED	PHIT
Crossplot Porosity	COMPUTED	PHIX
Intergranular Porosity	COMPUTED	PHIZ
Pressure 100's Digit	RFT	PHUN
Pileup in GST-A/IGT Spectrum	PRESS	PILE
Porosity Indicator Ratio	GST	PIR
Producibility Evaluation List Channel 1	PELOG	PL01
Producibility Evaluation List Channel 2	PELOG	PL02
Producibility Evaluation List Channel 3	PELOG	PL03
Producibility Evaluation List Channel 4	PELOG	PL04
Producibility Evaluation List Channel 5	PELOG	PL05
Producibility Evaluation List Channel 6	PELOG	PL06
Producibility Evaluation List Channel 7	PELOG	PL07
Producibility Evaluation List Channel 8	PELOG	PL08

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Producibility Evaluation List Channel 9	PELOG	PL09
Producibility Evaluation List Channel 10	PELOG	PL010
Producibility Evaluation List Channel 11	PELOG	PL011
Producibility Evaluation List Channel 12	PELOG	PL012
Planarity	DM	PLAN
Porosity Log - Sonic	COMPUTED	PLS
Plug	COMPUTED	PLUG
Proportion of Mineral 1 in Formation Matrix (LDT)	PRESS	PM1
Proportion of Mineral 2 in Formation Matrix (LDT)	PRESS	PM2
Proportion of Mineral 3 in Formation Matrix (LDT)	PRESS	PM3
Pump Motor Current	RFT	PMCU
Potassium Minus Standard Deviation-NGT	GLOBAL	PMSD
Positive Noise Sonic Amplitude	CMS	PNOI
PN Shale Index	LDT	PNSI
Pressure One's Digit	RFT	PONE
Potassium	NGT	POTA
Pad Pressure	DM	PP
Pulsar Peak Area 1	GST	PPA1
Pulsar Peak Area 2	GST	PPA2
Pulsar Peak Centroid 1	GST	PPC1
Pulsar Peak Centroid 2	GST	PPC2
Polarization Period	NMTC	PPER
Pore Pressure Grad. from Fracture Pressure Grad. Input	COMPUTED	PPGI
Pore Pressure Gradient from Resistivity	PORPRS	PPGR
Pore Pressure Gradient from Sonic	PORPRS	PPGS
Potassium Plus Standard Deviation - NGT	GLOBAL	PPSD
Pulsar Peak Width 1	GST	PPW1
Pulsar Peak Width 2	GST	PPW2
Poisson's Ratio	COMPUTED	PR
Analog Pressure	RFT	PRES
Panel Bulk Density	FDC	PRHO
Synthetic Seismogram Primary	GRFLCT	PRIM
Producibility Function	COMPUTED	PROD
Measure of PROX Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	PRON
Measure of PROX Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	PROP
PROX Resistivity	PROX/MLL	PROX
Porosity from RT	COMPUTED	PRT
Power Shallow	DLT	PS

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Positive Sonic Amplitude for Mode 1	CMS	PSA1
Positive Sonic Amplitude for Mode 2	CMS	PSA2
Positive Sonic Amplitude for Mode 3	CMS	PSA3
Positive Sonic Amplitude for Mode 4	CMS	PSA4
Phase Shift Down	EPT	PSD
Fitting Coefficient for SIGM From TDT	GLOBAL	PSIG
PCLog Divided by Square Root of Associated Eigen Value	PROJEC	PSLG
Fitting Coefficient for SP	GLOBAL	PSP
Phase Shift Up	EPT	PSU
Pressure, Surface	SPRO	PSUR
Bulk Volume Water (Unflushed Zone)	COMPUTED	PSW
Bulk Volume Water (Flushed Zone)	COMPUTED	PSX0
Potassium Theoretical - Global	GLOBAL	PT
Pressure 10's Digit	RFT	PTEN
Pressure 1000's Digit	RFT	PTH0
Fitting Coefficient of Propagation Time (EPT)	GLOBAL	PTPL
Potential Computed from FEP1 And FEP2	DM	PTS1
Fitting Coefficient of Photo Electric X-Section	GLOBAL	PU
White Stripe Between Arrow Grids	COMPUTED	PUM1
White Stripe Between Arrow Grids	COMPUTED	PUM2
Black Stripe to Identify Cyberdip	COMPUTED	PUM3
Black Stripe to Identify Cyberdip	COMPUTED	PUM4
Pressure of Well	SPRO	PW
Flow Rate, Total Best Probable Answer	PLIEDI	QBT.
Pore Volume Clay	COMPUTED	QCL
Standard Deviation of EPT Attenuation of Mud Filtrate	GLOBAL	QEAM
Standard Deviation of EPT Attenuation	GLOBAL	QEAT
Production Entry Heavy (Phase)	COMPUTED	QEH
Production Entry Light (Phase)	COMPUTED	QEL
Flow Rate Entry, Total	PRDLOG	QET
Quality Factor	COMPUTED	QFCT
Flow Rate, Gas Channel	PELOG	QGAS
Flow, Gas Contribution to Total	PELOG	QGC
Flow Rate, Gas Channel	DIFLOW	QGCH
Flow Rate, Gas from PELOG	PELOG	QGP
Gas Flow Total	PELOG	QGT
Hydrocarbon Channel Flow Rate	DIFLOW	QHCH
Production - Heavy Phase	COMPUTED	QHP

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Standard Deviation on Conductivity Given by ILD	GLOBAL	QILD
Standard Deviation on Conductivity Given by ILM	GLOBAL	QILM
Flow Rate of Liquid Channel	DIFLOW	QLCH
Production - Light Phase	COMPUTED	QLP
Quick Look Ratio (RXO/RT)	DIL/ISF	QLRA
Flow, Oil Contribution To Total	PELOG	QOC
Flow rate, Oil Channel	DIFLOW	QOCH
Flow rate, Oil Channel	PELOG	QOIL
Flow rate, Oil from PELOG	PELOG	QOP
Oil Flow Total	PELOG	QOT
Standard Deviation on Photo Electric Factor	GLOBAL	QPEF
Q Shale	COMPUTED	QS
Standard Deviation on Sigma TDT	GLOBAL	QSIG
Flow rate, Total	PRDLOG	QT
Standard Deviation of Propagation Time (EPT)	GLOBAL	QTPL
Standard Deviation of Propagation Time in Mud Filtrate	GLOBAL	QTPM
Standard Deviation on Photo Electric Cross Section	GLOBAL	QU
Quartzites, Facies	TYPOL	QUAR
Flow rate, Water Channel	PELOG	QWAT
Flow rate, Water Channel	DIFLOW	QWCH
Water Flow Total	PELOG	QWT
Resistivity 100 Percent Water Bearing	COMPUTED	RO
Raw Analog 0 for PIM	PIM	RA0P
Raw Analog 10 (Multi-gain)	PIM	RA10
Raw Analog 12 (Fast)	PIM	RA12
Raw Analog 13 (Fast)	PIM	RA13
Raw Analog 14 (Fast)	PIM	RA14
Raw Analog 1 for PIM	PIM	RA1P
Raw Analog 2 for PIM	PIM	RA2P
Raw Analog 3 for PIM	PIM	RA3P
Raw Analog 4 for PIM	PIM	RA4P
Raw Analog 5 for PIM	PIM	RA5P
Raw Analog 6 for PIM	PIM	RA6P
Raw Analog 8 for PIM	PIM	RA8P
Raw Acceleration	AMS	RACC

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Raw Amplitude Estimate	NML	RAE
Raw Amplitude Estimate, 2nd Cycle	NML	RAE2
Raw Amplitude Estimate, 3rd Cycle	NML	RAE3
Raw Activated Oxygen Count Rate	GST	RAOC
Raw Analog Pressure	RFT	RAPR
Raw Sonic (WST)	COMPUTED	RAWS
Raw Azimuth	DM	RAZI
Relative Bearing	DM	RB
Reconstructed Bulk Density (SXO=SW)	COMPUTED	RBD
Reconstructed Bulk Density (SXO=1)	COMPUTED	RBD1
Ratio Borehole Compensated	CBT	RBHC
Reference Check	DM	RC
Raw Counter 0 for PIM	PIM	RC0P
Raw Caliper 1	DM	RC1
Raw Counter 1 for PIM	PIM	RC1P
Raw Caliper 2	DM	RC2
Raw Counter 2 for PIM	PIM	RC2P
Raw Counter 3 for PIM	PIM	RC3P
Raw Caliper Data	MISC.	RCAL
Raw Capture Calcium	GST	RCCA
Raw Capture Chlorine	GST	RCCH
Raw Amplitude	MISC.	RCCL
Raw Capture Iron	GST	RCFE
Raw Capture Hydrogen	GST	RCHY
Residual Capture Inelastic		
Fit for GST-A/IGT	PRESS	RCIF
Ratio of Calculated Shear		
to Compression Travel Time	MECPRO	RCSC
Raw Capture Silicon	GST	RCSI
Raw Capture Sulphur	GSTA	RCSU
RCT Status	RCT	RCTS
Ratio Weight of Dry Clay		
to Weight of Solids	TAR	RDCS
Raw DDR Data Block	DM	RDDR
Raw Deviation	DM	RDEV
Raw Deep Current (35 Hz) 0 Deg	DLT	RDI0
Raw Deep Current (35 Hz) 90 Deg	DLT	RDI9
RFT Downhole Status Word	RFT	RDSW
Reconstructed Delta-T (SXO=SW)	COMPUTED	RDT
Reconstructed Delta-T (SXO=1)	COMPUTED	RDT1

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Raw Differential Temperature	MTS	RDTE
Raw Deep Voltage (35 Hz) 0 Deg	DLT	RDV0
Raw Groningen Voltage	DLT	RDV1
Raw Deep Voltage (35 Hz) 90 Deg	DLT	RDV9
Raw Eddy Current, Lower Array	PAT	RECL
Remote Epithermal Counts	CNT	RECN
Raw Eddy Current, Upper Array	PAT	RECU
Reference	DM	REFE
Reflection	COMPUTED	REFL
Reconstructed Gamma Ray	PARSEL	REGR
Raw Epithermal Neutron Ratio	CNT	RENR
Raw Epithermal Ratio	CNT	RERA
Raw Epithermal Remote Ratio	CNT	RERR
Reconstructed SP	PARSEL	RESP
Raw Far 1st Gate	TDT	RF1
Raw Far 10th Gate	TDT	RF10
Raw Far 11th Gate	TDT	RF11
Raw Far 12th Gate	TDT	RF12
Raw Far 13th Gate	TDT	RF13
Raw Far 14th Gate	TDT	RF14
Raw Far 15th Gate	TDT	RF15
Raw Far 16th Gate	TDT	RF16
Raw Far Detector Gate 1 Count Rate	TDT	RF1T
Raw Far 2nd Gate	TDT	RF2
Raw Far Detector Gate 2 Count Rate	TDT	RF2T
Raw Far 3rd Gate	TDT	RF3
Raw Far Detector Gate 3 Count Rate	TDT	RF3T
Raw Far 4th Gate	TDT	RF4
Raw Far 5th Gate	TDT	RF5
Raw Far 6th Gate	TDT	RF6
Raw Far 7th Gate	TDT	RF7
Raw Far 8th Gate	TDT	RF8
Raw Far 9th Gate	TDT	RF9
Resistivity of Fluid (Apparent)	COMPUTED	RFA
Raw Far FDC Count Rate	FDC	RFFD
Raw Flux Leakage, Lower Array	PAT	RFL
Raw Frequency for Long		
Spacing Control Loop	LDT	RFLS
Raw Flux Leakage, Upper Array	PAT	RFLU
Raw Force Exerted by Cable on Logging Head	DFE	RFOR

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Raw Thermal Far Remote Ratio	CNTG	RFRR
Raw Frequency for Short Spacing Control Loop	LDT	RFSS
Raw Far Thermal Neutron Decay Time	TDT	RFTA
Raw Far TDTM Count Rate	TDTM	RFTD
Ratio of Shear Modulus to Compressibility, Bulk	COMPUTED	RGCS
Raw Gamma Ray	MISC.	RGR
Raw Gradiomanometer Density	GMS	RGRH
Raw Gamma Ray (SGT-N)	SGT	RGRS
Raw Gamma Ray (from) TETD	TET	RGRT
Raw Hole Diameter	EPT	RHD
Raw HDT Data Block (CSU)	DM	RHDT
Grain Density Limited	COMPUTED	RHG
Average Grain Density	COMPUTED	RHGA
Formation Grain Density	COMPUTED	RHGF
Grain Density Unlimited	COMPUTED	RHGI
Grain Density from Cross-plot Porosity	COMPUTED	RHGX
Density Hydrocarbon Index	INCH	RHI
Density Hydrocarbon Minimum Index	INCH	RHMI
Bulk Density	FDC	RHOB
Apparent Grain Density	COMPUTED	RHOG
Hydrocarbon Density	COMPUTED	RHOH
RHOB Written on a Time Base for Geogram	COMPUTED	RHOT
Density Used to Calculate Overburden Pressure	COMPUTED	RHOV
Raw HP Gauge Temperature	RFT	RHPT
Raw I0 (MSFL Conductivity)	MSFL	RI0
Raw I1 Conductivity	MSFL	RI1
Raw Inelastic Carbon	GST	RIC
Raw Inelastic Calcium	GST	RICA
Raw Inelastic Carbon Window Count Rate	GST	RICW
Raw ILD Conductivity	DIL/ISF	RILD
Raw ILM Conductivity	DIL/ISF	RILM
Raw ILX Susceptibility	ILT	RILX
Raw Inelastic Oxygen	GST	RIO
Raw Inelastic Oxygen Window Count Rate	GST	RIOW
Raw IRD	DITX	RIRD
Raw IRM	DITX	RIRM
Raw Inelastic Silicon	GST	RISI
Raw IXD	DITX	RIXD
Raw IXM	DITX	RIXM

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Relative Permeability to Gas	PELOG	RKG
Relative Permeability to Hydrocarbon	PERMS	RKH
Relative Permeability to Oil	PELOG	RKO
Relative Permeability to Water	PELOG	RKW
Raw Large Arm	MISC.	RLA
Raw LITH Count Rate	LDT	RLIT
Raw LL Count Rate	LDT	RLL
Raw LL8 Conductivity	DIL/ISF	RLL8
Raw Latero-Log Deep Resistivity	DLL	RLLD
Raw Latero-Log Shallow Resistivity	DLL	RLLS
Raw Long Spacing Count Rate	LDT	RLS
Raw Long Upper 1 - 2 Count Rate	LDT	RLU
Raw Long Upper 1 Count Rate	LDT	RLU1
Raw Long Upper 2 Count Rate	LDT	RLU2
Apparent Mud Filtrate Resistivity	COMPUTED	RMFA
Resistivity Mud Filtrate Ratio (RMFA/RMF)	SARLOG	RMFR
Apparent Mud Filtrate Resistivity from Crossplot Porosity	COMPUTED	RMFX
Raw Micro-Inverse	MISC.	RMI
Raw MLL	COMPUTED	RMLL
Raw Micro-Normal	MISC.	RMN
Raw Manometer Pressure	MTS	RMP
Ratio of Measured Shear and Compressional Travel Times	MECPRO	RMSC
Raw MSFL Conductivity	MSFL	RMSF
Root Mean Square Velocity (Seismic)	COMPUTED	RMSV
Raw Near 1st Gate	TDT	RN1
Raw Near 10th Gate	TDT	RN10
Raw Near 11th Gate	TDT	RN11
Raw Near 12th Gate	TDT	RN12
Raw Near 13th Gate	TDT	RN13
Raw Near 14th Gate	TDT	RN14
Raw Near 15th Gate	TDT	RN15
Raw Near 16th Gate	TDT	RN16
Raw Near Detector Gate 1 Count Rate	TDT	RN1T
Raw Near 2nd Gate	TDT	RN2
Raw Near Detector Gate 2 Count Rate	TDT	RN2T
Raw Near 3rd Gate	TDT	RN3
Raw Near Detector Gate 3 Count Rate	TDT	RN3T

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Raw Near 4th Gate	TDT	RN4
Raw Near 5th Gate	TDT	RN5
Raw Near 6th Gate	TDT	RN6
Raw Near 7th Gate	TDT	RN7
Raw Near 8th Gate	TDT	RN8
Raw Near 9th Gate	TDT	RN9
Raw Net Count Rate from Spectrum A	GST	RNCR
Raw Neutron Depth Log	NDT	RNDL
Raw Neutron	GNT	RNEU
Raw Near FDC Count Rate	FDC	RNFD
Raw Neutron Ratio (Near/Far)	CNL	RNRA
Raw Near TDTM Count Rate	TDTM	RNTD
Residual Oil Saturation	INCH	ROS
Raw Power Deep	DLT	RPD
Density from Photo Electric Factor	GLOBAL	RPEF
Raw Pressure 100's Digit	RFT	RPHU
Raw Pressure one's Digit	RFT	RPON
Raw Potassium Output	NGT	RPOT
Raw Pressure	RFT	RPRE
Raw PROX Conductivity	PROX/MLL	RPRO
Raw Power Shallow	DLT	RPS
Pass 1 Raw Data Block	DM	RPS1
Raw Pressure 10's Digit	RFT	RPTE
Raw Pressure 1000's Digit	RFT	RPTH
Raw Relative Bearing	DM	RRB
Computed Reconstructed RHOB (with SXO - 100 Percent)	COMPUTED	RRB1
Raw Density	GDRIFT	RRHO
Raw Small Arm	PCD	RSA
Raw SFL Bucking Current	DITX	RSFB
Raw SFC	DITX	RSFC
Raw SFL Conductivity	DIL/ISF	RSFL
Raw SFV	DITX	RSFV
Ratio of Gas in Solution in Oil	PVTANA	RSGO
Raw Strain Gauge Pressure	RFT	RSGP
Raw Spectroscopy Gamma Ray Output	NGT	RSGR
Ratio of Gas in Solution in Water	PVTANA	RSGW
Raw Shallow Current (280 Hz) 0 Deg	DLT	RSI0
Raw Shallow Current (280 Hz) 90 Deg	DLT	RSI9
Raw Sigma	TDT	RSIG
Raw Short Normal Res.	DIL/ISF	RSN

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Raw Sidewall Neutron Detector	SNP	RSND
Raw SP without Offset	MISC.	RSP
Raw Sparc	MISC.	RSPA
Raw Spinner Speed	PL	RSPI
Ratio of Silt to Solids	TAR	RSS
Raw Short Spacing 1 Count Rate	LDT	RSS1
Raw Short Spacing 2 Count Rate	LDT	RSS2
Ratio of Matrix to Solids	TAR	RSSO
Raw Stabilization Indicator	NGT	RSTA
Raw Shallow Voltage (280 Hz) 0 Deg	DLT	RSV0
Raw Shallow Voltage (280 Hz) 90 Deg	DLT	RSV9
True Resistivity	COMPUTED	RT
Raw T2 Signal Decay Time	NML	RT2
Raw Thermal Neutron Decay Time	GST	RTAU
Remote Thermal CNL Counts	CNT	RTCN
Raw Temperature	MTS	RTEM
Raw Thorium Output	NGT	RTHO
Raw Transits Long Spacing Loop	LDT	RTLS
RT in Normal Pressure Shales	PORPRS	RTNP
Raw Thermal Neutron Ratio	CNT	RTNR
Raw TDTK Ratio (Near/Far)	TDT	RTRA
Raw Thermal Remote Ratio	CNT	RTRR
Raw Transits Short Spacing Loop	LDT	RTSS
Raw Uranium Output	NGT	RURA
Ratio of Window 1 Counts to Window 2 counts for Barite	PRENGT	RW12
Raw Window 1 - NGT	NGT	RW1N
Raw Window 2 - NGT	NGT	RW2N
Raw Window 3 - NGT	NGT	RW3N
Raw Window 4 - NGT	NGT	RW4N
Raw Window 5 - NGT	NGT	RW5N
Resistivity of Water (Apparent)	COMPUTED	RWA
Ratio of RWA to RW	COMPUTED	RWAR
Resistivity of Water Apparent from Xs-plot Porosity	COMPUTED	RWAX
Ratio Weight of Tar to Weight of Dry Solids	TAR	RWTS
Resistivity of Flushed Zone	COMPUTED	RX0
Surface 1 for VSP/WST	VSP	S1
Shift at Channel 140 of GST-A/IGT Spectrum after Gain-0	PRESS	S140

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Short Spacing 1 Density	LDT	S1RH
Surface 1 Stack for VSP/WST	VSP	S1S
Short Spacing 2 Density	LDT	S2RH
Small Arm	MISC.	SA
Sonic Amplitude from Subcycle 1	SONIC	SA1
Sonic Amplitude Subcycle 1 from Module	CBT	SA1M
Sonic Amplitude from Subcycle 2	SONIC	SA2
Sonic Amplitude Subcycle 2 from Module	CBT	SA2M
Sonic Amplitude for Subcycle 3	CBT	SA3
Sonic Amplitude Subcycle 3 from Module	CBT	SA3M
Sonic Amplitude for Subcycle 4	CBT	SA4
Sonic Amplitude Subcycle 4 from Module	CBT	SA4M
Spectrum A Count Rate	GST	SACR
Spectroscopic Averages Data Block	GST	SADB
Spectrum A Discriminated Count Rate	GST	SADC
Safety Signal from Hydraulic System	WST	SAFE
Sandy Rock Facies	TYPOL	SAND
Status of ATC	MISC.	SATC
Spectrum Accumulation Time	GST	SATI
Sonic Attenuation	COMPUTED	SATT
Shallow Bucking Current Attenuation	DLT	SBCA
Bound Water Saturation from Continuity Constraint	DWS	SBCC
Spectrum B Count Rate	GST	SBCR
Bound Water Saturation from CWA Analysis	PARSEL	SBCW
Spectrum B Discriminated Count Rate	GST	SBDC
Bound Water Saturation from Sonic Delta T	DWS	SBDT
Bound Water Saturation from EPT Tool	DWS	SBEP
Bound Water Saturation from External Source	DWS	SBEX
Bound Water Saturation from GR/PHIT Relationship	DWS	SBGP
Bound Water Saturation from GR Analysis	PARSEL	SBGR
Bound Water Saturation from LDT Tool	DWS	SBLD
Bound Water Saturation from Neutron & Density Data	DWS	SBND
Bound Water Saturation from Neutron	DWS	SBNE
Bound Water Saturation from NGT Tool	DWS	SBNG
Bound Water Saturation from NML Tool	DWS	SBNM
Bound Water Saturation from Sigma	DWS	SBSI
Bound Water Saturation from SP	PARSEL	SBSP
Saturation Bound Water	DWRIG	SBW
Speed Correction	DM	SC
Sum of Capture Yields In Inelastic Gate	GSTA	SCAP

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Stack Catalogue	WSTLIS	SCAT
Spectrum C Count Rate	GST	SCCR
Spectrum C Discriminated Count Rate	GST	SCDC
Status of CNL	CNT	SCNL
Geogram Linear Dip 1	COMPUTED	SD01
Geogram Linear Dip 2	COMPUTED	SD02
Geogram Linear Dip 3	COMPUTED	SD03
Geogram Linear Dip 4	COMPUTED	SD04
Geogram Linear Dip 5	COMPUTED	SD05
Geogram Linear Dip 6	COMPUTED	SD06
Geogram Linear Dip 7	COMPUTED	SD07
Geogram Linear Dip 8	COMPUTED	SD08
Geogram Linear Dip 9	COMPUTED	SD09
Geogram Linear Dip 10	COMPUTED	SD10
Geogram Linear Dip 11	COMPUTED	SD11
Geogram Linear Dip 12	COMPUTED	SD12
Geogram Linear Dip 13	COMPUTED	SD13
Geogram Linear Dip 14	COMPUTED	SD14
Geogram Linear Dip 15	COMPUTED	SD15
Geogram Linear Dip 16	COMPUTED	SD16
Geogram Linear Dip 17	COMPUTED	SD17
Geogram Linear Dip 18	COMPUTED	SD18
Geogram Linear Dip 19	COMPUTED	SD19
Geogram Linear Dip 20	COMPUTED	SD20
Geogram Linear Dip 21	COMPUTED	SD21
Geogram Linear Dip 22	COMPUTED	SD22
Geogram Linear Dip 23	COMPUTED	SD23
Geogram Linear Dip 24	COMPUTED	SD24
Geogram Linear Dip 25	COMPUTED	SD25
Geogram Linear Dip 26	COMPUTED	SD26
Geogram Linear Dip 27	COMPUTED	SD27
Geogram Linear Dip 28	COMPUTED	SD28
Geogram Linear Dip 29	COMPUTED	SD29
Geogram Linear Dip 30	COMPUTED	SD30
Geogram Linear Dip 31	COMPUTED	SD31
Seismic Data 32	VSP	SD32
Seismic Data 33	VSP	SD33
Seismic Data 34	VSP	SD34
Seismic Data 35	VSP	SD35
Seismic Data 36	VSP	SD36

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Seismic Data 37	VSP	SD37
Seismic Data 38	VSP	SD38
Seismic Data 39	VSP	SD39
Seismic Data 40	VSP	SD40
Seismic Data 41	VSP	SD41
Seismic Data 42	VSP	SD42
Seismic Data 43	VSP	SD43
Seismic Data 44	VSP	SD44
Seismic Data 45	VSP	SD45
Seismic Data 46	VSP	SD46
Seismic Data 47	VSP	SD47
Seismic Data 48	VSP	SD48
Seismic Data 49	VSP	SD49
Seismic Data 50	VSP	SD50
Spectrum Data Buffer	GST	SDB
Source Distance Below Surface	WSTLIS	SDBS
Standard Deviation of Computed Gamma Ray-NGT	GLOBAL	SDCG
Stationary Depth	NMTC	SDEP
Standard Deviation of Potassium - NGT	GLOBAL	SDP
Secondary Density Porosity	LDT	SDPH
Secondary Delta-Rho	LDT	SDRH
Standary Deviation of Thorium - NGT	GLOBAL	SDT
Standary Deviation of Uranium - NGT	GLOBAL	SDU
Seal Signal	RFT	SEAL
Spectroscopic Errors Data Block	GST	SEDB
Status of EPT	EPT	SEPT
Salt Facies	TYPOL	SFAC
SARABAND Flag of Altered Data	COMPUTED	SFAD
SFL Bucking Current	DITX	SFB
SFL Current	DITX	SFC
Spherically Focussed Log	MISC.	SFL
SFL Averaged over 2.5 Feet	DIL/ISF	SFLA
Measure of SFL Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	SFLN
Measure of SFL Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	SFLP
SFL Unaveraged	DIL/ISF	SFLU
SARABAND Flag of Shale Indicator	COMPUTED	SFSI
SFL Voltage	DITX	SFV
Saturation of Gas in Matrix as Determined by PHIC	PRINCE	SG

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Signature - Geogram Natural Trace	COMPUTED	SGNT
Strain Gauge Pressure	RFT	SGP
Spectroscopy Gamma-Ray	NGT	SGR
Spherical Gas Slope	RFT	SGS
Superficial Gas Velocity	PVTANA	SGV
Shale	COMPUTED	SHAL
Status of HDT	DM	SHDT
Shelly Rocks Facies	TYPOL	SHEL
Shot Depth (WST)	COMPUTED	SHOT
Sharpness	DM	SHRP
Shot Time (WST)	COMPUTED	SHTM
Computed Silt Index	COMPUTED	SI
Shallow Current (280 Hz) 0 Deg	DLT	SI0
Shallow Current (280 Hz) 90 Deg	DLT	SI90
Capture Cross-Section of the Second TDT Run	TDT	SIG2
Sigma (Neutron Capture Cross Section)	TDT	SIGM
Measure of Sigma Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	SIGN
Measure of Sigma Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	SIGP
Theoretical SIGMA, Upper Limit	GLOBAL	SIGQ
Theoretical SIGMA, Lower Limit	GLOBAL	SIGT
Sigma Variation between Two TDT Runs	TDT	SIGV
Siliceous Rocks	TYPOL	SILI
Silt Facies	TYPOL	SILT
Salinity Indicator Ratio	GST	SIR
Saturation of Liquid	PELOG	SL
Status LDTC	LDT	SLDT
Sonic Limit Porosity	COMPUTED	SLP
Superficial Liquid Velocity	PVTANA	SLV
Signal Multiples (Geogram)	COMPUTED	SMUL
Geogram Multiples Only	COMPUTED	SMUO
Short Normal	DIL/ISF	SN
Sidewall Neutron Detector	SNP	SND
Sidewall Neutron Porosity	SNP	SNP
Sidewall Neutron R0	COMPUTED	SNR0
Shot Number for VSP/WST	VSP	SNUM
Saturation of Oil	PELOG	SO
Spontaneous Potential	MISC.	SP

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Sparc	MISC.	SPAR
Status of PCD	PCD	SPCD
Status of PGT	PGS	SPGT
Sonic Porosity	SONIC	SPHI
Secondary Porosity Index	COMPUTED	SPI
Spinner Speed	PL	SPIN
Spontaneous Potential Millivolt Potential	MISC.	SPMV
Geogram Primaries	COMPUTED	SPRM
SP Slowed (Delayed)	HDT	SPS
SP Shale Index	COMPUTED	SPSI
SP Volts (Measured SP)	MISC.	SPV
Spectrum Quality Factor 1	GST	SQF1
Spectrum Quality Factor 2	GST	SQF2
Sonic R0	SONIC	SR0
Sonic Ratio (Near-to-far Amplitudes)	SONIC	SRAT
Sample Rate Downhole Sensor	WSTLIS	SRDS
Signal Reflection (Geogram)	COMPUTED	SREF
SP Resistivity of Fluid (Apparent)	COMPUTED	SRFA
Secondary Bulk Density (RHO Star)	LDT	SRHO
Sample Rate Surface Sensor	WSTLIS	SRSS
Short Spacing 1 Window Count Rate	LDT	SS1
Short Spacing 2 Window Count Rate	LDT	SS2
Smoothed Strain Gauge Pressure	RFT	SSGP
Short Spacing High Voltage Loop Output	LDT	SSHV
Spherical Slope	RFT	SSLO
Sand Surface Pressure	PELOG	SSPR
Stabilization Indicator	NGT	STAB
Shot Time Day	DWSTLIS	STD
Status of TDTM	TDT	STDT
Spherical Time Function	RFT	STF
Shot Time Hour	WSTLIS	STH
Shot Time Level (WST)	COMPUTED	STLV
Shot Time Minute	WSTLIS	STM
Signal to Noise Ratio	NMTC	STNR
Shallow Voltage (280 Hz) 0 Deg	DLT	SV0
Shallow Voltage (280 Hz) 90 Deg	DLT	SV90
Sonic Velocity	COMPUTED	SVEL
Water Saturation	COMPUTED	SW
Saturation of Water (Apparent)	COMPUTED	SWA
Bound Water Saturation	COMPUTED	SWB
Bound Water Saturation Uncorrected	DWS	SWBU

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Saturation of Water Cased Hole	INCH	SWC
Sigma Water Free Reconstructed from Open Hole Data	PRINCE	SWFR
Saturation of Water Irreducible	COMPUTED	SWI
Saturation of Water for Production Management Log	INCH	SWPM
Saturation of Water for the Previous PML	INCH	SWPP
Ratio Water Saturation	COMPUTED	SWR
Total Water Saturation	COMPUTED	SWT
SW Computed from TDT	COMPUTED	SWTD
Flushed Zone Water Saturation	COMPUTED	SX0
Flushed Water Saturation Apparent	COMPUTED	SXA
Invaded Zone Saturation for DWRIG	DWRIG	SXOT
Sylvinite Facies	TYPOL	SYLV
T0 Amplitude	SONIC	T0
T1 Relaxation Time A	NMTC	T1A
T1 Relaxation Time B	NMTC	T1B
T2 Signal Decay Time	NMTC	T2
Neutron Decay Time Constant	TDT	TAU
Decay Time of the Second TDT Run	TDT	TAU2
True Azimuth of Pad 1	COMPUTED	TAZ1
True Azimuth of Deviation	COMPUTED	TAZD
Temperature Channel Number 01	PEPL	TC01
Temperature Channel Number 02	PEPL	TC02
Temperature Channel Number 03	PEPL	TC03
Temperature Channel Number 04	PEPL	TC04
Temperature Channel Number 05	PEPL	TC05
Temperature Channel Number 06	PEPL	TC06
Temperature Channel Number 07	PEPL	TC07
Temperature Channel Number 08	PEPL	TC08
Temperature Channel Number 09	PEPL	TC09
Temperature Channel Number 10	PEPL	TC10
Temperature Channel Number 11	PEPL	TC11
Temperature Channel Number 12	PEPL	TC12
Temperature Channel Number 13	PEPL	TC13
Temperature Channel Number 14	PEPL	TC14
Temperature Channel Number 15	PEPL	TC15
TTR HDT Raw Data Block	DM	TDIP
Temperature	MISC.	TEMP

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Tension	MISC.	TENS
Thermal Far Remote Neutron Porosity	CNT	TFRP
Thermal Far Remote Ratio	CNT	TFRR
TAU Gate 1 Count Rate	GST	TG1C
TAU Gate 2 Count Rate	GST	TG2C
TAU Gate 3 Count Rate	GST	TG3C
Thorium	NGT	THOR
10's Digit of HP Gauge Pressure	HPA	THPG
THT High Voltage Output	NGT	THT
Corrected Travel Time (WST)	COMPUTED	TIMC
Time per Frame	MISC.	TIME
Tuffaciousness Indicator Ratio	GST	TIR
Tubing Joints and Packer Segments		
Tubing 1-Left Edge	COMPUTED	TJ1L
Tubing Joints and Packer Segments		
Tubing 1-Right Edge	COMPUTED	TJ1R
Tubing Joints and Packer Segments		
Tubing 2-Left Edge	COMPUTED	TJ2L
Tubing Joints and Packer Segments		
Tubing 2-Right Edge	COMPUTED	TJ2R
Tubing Joints and Packer Segments		
Tubing 3-Left Edge	COMPUTED	TJ3L
Tubing Joints and Packer Segments		
Tubing 3-Right Edge	COMPUTED	TJ3R
Tubing Joints and Packer Segments		
Tubing 4-Left Edge	COMPUTED	TJ4L
Tubing Joints and Packer Segments		
Tubing 4-Right Edge	COMPUTED	TJ4R
Tubing Joints and Packer Segments		
Tubing 5-Left Edge	COMPUTED	TJ5L
Tubing Joints and Packer Segments		
Tubing 5-Right Edge	COMPUTED	TJ5R
TAU Low	TDT	TL
Thorium Minus Standard Deviation - NGT	GLOBAL	TMSD
Thermal Neutron Porosity	CNT	TNPH
Thermal Neutron Ratio	CNT	TNRA
Time of First Downhole Datum	WSTLIS	TOFD
Time of First Surface Datum	WSTLIS	TOFS
Toughness	MECPRO	TOUG
Thorium, Potassium Cross Correlation (NGT)	PRENGT	TPCC

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
TDT PHI Effectiveness	INCH	TPE
TDT Porosity	TDT	TPHI
Time of Propagation in Lossy Formation	EPT	TPL
Measure of TPL Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	TPLN
Measure of TPL Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	TPLP
Theoretical Value of Propagation Time (EPT)	GLOBAL	TPLT
Time Propagation Matrix (Apparent)	COMPUTED	TPMA
Time Propagation Matrix Computed	EPT	TPMC
Time Propagation in Mud Filtrate (EPT-Data)	GLOBAL	TPMF
Thorium and Potassium Ratio	NGTPRE	TPRA
Thorium Plus Standard Deviation - NGT	GLOBAL	TPSD
Time of propagation in water (lossless)	EPT	TPW0
Total Flow Contributed by both Gas and Oil	PELOG	TQ
TDT R0	COMPUTED	TR0
Ratio of the Second TDT Run	TDT	TRA2
TDT Ratio	TDT	TRAT
Thermal Remote Neutron Porosity	CNT	TRNP
Thermal Remote Ratio	CNT	TRRA
Tubing Screens for Tubing Number 1	COMPUTED	TSC1
Tubing Screens for Tubing Number 2	COMPUTED	TSC2
Tubing Screens for Tubing Number 3	COMPUTED	TSC3
Tubing Screens for Tubing Number 4	COMPUTED	TSC4
Tubing Screens for Tubing Number 5	COMPUTED	TSC5
Tool Status Data Block	GST	TSDB
10's SGP Digit (Display)	RFT	TSGP
Transit Time	SONIC	TT
Transit Time from Subcycle 1	SONIC	TT1
Transit Time from Subcycle 2	SONIC	TT2
Transit Time from Subcycle 3	SONIC	TT3
Transit Time from Subcycle 4	SONIC	TT4
Thorium Theoretical - GLOBAL	GLOBAL	TTH
Transit Time Integration (Cumulative)	SLTJ	TTIC
Transit Time	WSTLIS	TTIM
Tubing String Number 1	COMPUTED	TUB1
Tubing String Number 2	COMPUTED	TUB2
Tubing String Number 3	COMPUTED	TUB3
Tubing String Number 4	COMPUTED	TUB4
Tubing String Number 5	COMPUTED	TUB5

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Thorium, Uranium Cross Correlation (NGT)	PRENGT	TUCC
Thorium and Uranium Ratio	NGTPRE	TURA
True Vertical One Way Time from Surface	COMPUTED	TV1W
True Vertical Two Way Time from Surface	COMPUTED	TV2W
True Vertical Depth	COMPUTED	TVDE
Transmitter Voltage	CBT	TVOL
Temperature of Well	SPRO	TW
Two Way Travel Time (Relative to Seismic Reference)	GMULTP	TWOT
Photo Electric Cross Section from LDT	GLOBAL	U
Uncorrected Activated Oxygen Count Rate	GST	UAOC
Uniaxial Compressive Strength	MECPRO	UCS
Upper Ejector Indicator	COMPUTED	UEI
Uncorrected Far Gate 1 of TDTK	TDT	UF1T
Upper Limit of DT Theoretical	DWRIG	ULDT
Photo Electric X-Section for Matrix, Apparent	GLOBAL	UMA
Uranium Minus Standard Deviation - NGT	GLOBAL	UMSD
Uphole Motor Volts	RFT	UMV
Photo Electric Cross Section Minus SQRT (SIGMA**2+TAU**2)	GLOBAL	UN
Uncorrected Near Gate 1 of TDTK	TDT	UNIT
Uncorrected Time Tics (WST)	COMPUTED	UNCO
Photo Electric Cross Section Plus SQRT (SIGMA**2+TAU**2)	GLOBAL	UP
Uranium, Potassium Cross Correlation (NGT)	PRENGT	UPCC
Uranium and Potassium Ratio	NGTPRE	UPRA
Uranium Plus Standard Deviation - NGT	GLOBAL	UPSD
Uranium	NGT	URAN
Up Speed of Cable Pass Number 1	PEPL	US01
Up Speed of Cable Pass Number 2	PEPL	US02
Up Speed of Cable Pass Number 3	PEPL	US03
Up Speed of Cable Pass Number 4	PEPL	US04
Up Speed of Cable Pass Number 5	PEPL	US05
Up Speed of Cable Pass Number 6	PEPL	US06
Up Speed of Cable Pass Number 7	PEPL	US07
Up Speed of Cable Pass Number 8	PEPL	US08
Up Speed of Cable Pass Number 9	PEPL	US09
Up Speed of Cable Pass Number 10	PEPL	US10
Up Speed of Cable Pass Number 11	PEPL	US11
Up Speed of Cable Pass Number 12	PEPL	US12

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Up Speed of Cable Pass Number 13	PEPL	US13
Up Speed of Cable Pass Number 14	PEPL	US14
Up Speed of Cable Pass Number 15	PEPL	US15
Upper Sample Open Valve 1 Signal	RFT	USAM
Uphole Status Word	MISC.	USW
Photo Electric Cross Section, Theoretical	GLOBAL	UT
Volume of Bound Water	DWRIG	VBW
Volume of Clay from EPT Attenuation	DWS	VCEA
Volume of Clay Computed from Gamma Ray	DWS	VCGR
Volume of Clay Computed from Hydrocarbon Density	DWS	VCHD
Volume of Clay	COMPUTED	VCL
Volume of Clay from Neutron and Density	DWS	VCND
Volume of Clay Computed from SP	DWS	VCSP
Volume of Dry Clay	DWS	VDCL
Vertical Depth Channel	TVDCPI	VDEP
Vertical Depth Relative to KB	WST	VDKB
Volume of Dolomite with Respect to Total Volume	GLOBAL	VDOL
Velocity	MISC.	VEL
Volume of Hydrocarbon	COMPUTED	VH
Volume of Limestone with Respect to Total Volume	GLOBAL	VLIM
Volume (Fractional) of Mineral 1	GLOBAL	VM1
Volume (Fractional) of Minerals 1 and 2	GLOBAL	VM12
Volume (Fractional) of Mineral 2	GLOBAL	VM2
Volume (Fractional) of Mineral 3	GLOBAL	VM3
Validation Mark of the Sequence	DM	VPS1
Water Slip Velocity	PL	VS
V-Shale Computed (Spectro) Gamma Ray	NGT	VSCG
Volume of Shale (Cross-plot)	COMPUTED	VSCP
Volume of Shale (CNL/RT)	COMPUTED	VSCR
Volume of Shale, Delimiter	COMPUTED	VSD
V-shale Difference	NGT	VSDI
Volume of Shale, Density-Neutron	COMPUTED	VSDN
Volume of Shale, Density-Sonic	COMPUTED	VSDS
Volume of Shale, Gamma Ray	COMPUTED	VSGR
Volume of Shale	COMPUTED	VSH
Volume of Special Mineral 0	DWRIG	VSM0
Volume (Fractional) of Special Mineral 1	GLOBAL	VSM1
Volume (Fractional) of Special Mineral 2	GLOBAL	VSM2

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Volume (Fractional) of Special Mineral 3	GLOBAL	VSM3
Volume of Shale (M-N X-plot)	COMPUTED	VSMN
Volume of Shale from Normalized PHIT and SIGMA	INCH	VSNP
Volume of Shale (NPHI-RT)	COMPUTED	VSNR
Volume of Shale (NPHI-Sonic X-plot)	COMPUTED	VSNS
V-Shale Potassium Computed	NGT	VSPC
Volume of Shale from Porosity Effective	INCH	VSPE
Volume of Shale, Porosity from Neutron	COMPUTED	VSPN
Volume of Shale, RT	COMPUTED	VSRT
Volume of Shale from Resistivity to Water Apparent	INCH	VSRW
Volume of Shale from Sigmas and Conductivities	INCH	VSSC
V-Shale Spectro Gamma Ray Computed	NGT	VSSG
Volume of Shale, SP	COMPUTED	VSSP
Volume of Shale, Sonic-RT	COMPUTED	VSSR
V-Shale Thorium Computed	NGT	VSTC
V-Shale Uranium Computed	NGT	VSUC
Velocity (Synthetic)	ITPLOG	VSYN
Volume of Water (Bulk)	COMPUTED	VW
Volume of Water (Apparent)	COMPUTED	VWA
Flushed Zone Water Volume	COMPUTED	VW XO
Flushed Water Volume Apparent	COMPUTED	VXA
Volume (Fractional) of X (Special) Mineral	GLOBAL	VXM
Window 0	NGT	W0
Window 1 Counts Minus 1 Standard Deviation	PRENGT	W1MS
Window 1 (0.150 - 0.5 MEV)	NGT	W1NG
Window 1 Counts Plus 1 Standard Deviation	PRENGT	W1PS
Window 2 Counts Minus 1 Standard Deviation	PRENGT	W2MS
Window 2 (0.5 - 1.1 MEV)	NGT	W2NG
Window 2 Counts Plus 1 Standard Deviation	PRENGT	W2PS
Window 3 Counts Minus 1 Standard Deviation	PRENGT	W3MS
Window 3 (1.1 - 1.6 MEV)	NGT	W3NG
Window 3 Counts Plus 1 Standard Deviation	PRENGT	W3PS
Window 4 Counts Minus 1 Standard Deviation	PRENGT	W4MS
Window 4 (1.6 - 2.0 MEV)	NGT	W4NG
Window 4 Counts Plus 1 Standard Deviation	PRENGT	W4PS
Window 5 Counts Minus 1 Standard Deviation	PRENGT	W5MS
Window 5 (2 - 3 MEV)	NGT	W5NG
Window 5 Counts Plus 1 Standard Deviation	PRENGT	W5PS

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Waveform 2	NMTC	WAV2
Waveform 3	NMTC	WAV3
Waveform	NML	WAVE
Windows Carbon/Oxygen Ratio	GST	WCOR
Water Cut Curve	PELOG	WCUT
Waveform Depth	NML	WDEP
Waveform Envelope, 2nd Cycle	NMTC	WEN2
Waveform Envelope, 3rd Cycle	NMTC	WEN3
Waveform Envelope	NMTC	WENV
Waveform 1	SONIC	WF1
Waveform 1 Depth	SONIC	WF1D
Waveform 1 Normalization Factor	SONIC	WF1N
Waveform 2	SONIC	WF2
Waveform 2 Depth	SONIC	WF2D
Waveform 2 Normalization Factor	SONIC	WF2N
Waveform 3	SONIC	WF3
Waveform 3 Depth	SONIC	WF3D
Waveform 3 Normalization Factor	SONIC	WF3N
Waveform 4	SONIC	WF4
Waveform 4 Depth	SONIC	WF4D
Waveform 4 Normalization Factor	SONIC	WF4N
Wetness Factor	DWS	WFAC
Waveform from Noise Mode	CMS	WFN
Noise Waveform's Depth	CMS	WFND
Noise Waveform's Normalization Factor	CMS	WFNN
Window for Lower Loop (60 - 80 KEV)	NGT	WLL
Water Density	PVTANA	WRHO
Waveform Scale - Second Cycle (2)	NMTC	WSC2
Waveform Scale - Third Cycle (3)	NMTC	WSC3
Waveform Scale	NML	WSCA
Water Sigma (Wet)	COMPUTED	WSIG
WST Interval Velocity	COMPUTED	WSTI
Window for Upper Loop (40 - 60 KEV)	NGT	WUL
Water Viscosity	PVTANA	WVIS
RX0/RT	COMPUTED	XORT
Gas Holdup	PL	YG
Heavy Phase Holdup	PL	YH
Light Phase Holdup	PL	YL
Liquid Holdup	PVTANA	YLI
Youngs Modulus (E)	MECPRO	YME

LOG INFORMATION STANDARD

SORTED BY MNEMONIC

NAME	TOOL	MNEMONIC
Oil Holdup	PL	YO
Zinc Centroid For GST-A/IGT		
Spectrum Calibration	PRESS	ZENC
Zero	COMPUTED	ZER2
Zero	MISC.	ZERO
Effective Atomic Number Z from LDT	LDT	ZLD
Zero Latch Setting	GST	ZLSE
Zero Phase Shot Alignment	SKETCH	ZPSA

LOG INFORMATION STANDARD

CHANNEL MNEMONICS

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Attenuate		AFP
Channel Name		DEPT
Correction Factor on ILD	ADI	CFID
Correction Factor on ILM	ADI	CFIM
Correction Factor on LL8	ADI	CFL8
ILD Error Correction	ADI	ILDE
ILD Rectangular Log	ADI	ILDR
ILM Error Correction	ADI	ILME
ILM Rectangular Log	ADI	ILMR
LL8 Error Correction	ADI	LL8E
LL8 Rectangular Log	ADI	LL8R
Auxiliary Measurements Sonde	AMS	AMS
Head Tension	AMS	HTEN
Mud Resistivity	AMS	MRES
Mud Temperature	AMS	MTEM
Raw Acceleration	AMS	RACC
Attenuation Borehole Compensated	CBT	ABHC
Casing Bond Tool Status	CBT	CBTS
Ratio Borehole Compensated	CBT	RBHC
Sonic Amplitude Subcycle 1 from Module	CBT	SA1M
Sonic Amplitude Subcycle 2 from Module	CBT	SA2M
Sonic Amplitude for Subcycle 3	CBT	SA3
Sonic Amplitude Subcycle 3 from Module	CBT	SA3M
Sonic Amplitude for Subcycle 4	CBT	SA4
Sonic Amplitude Subcycle 4 from Module	CBT	SA4M
Transmitter Voltage	CBT	TVOL
Auxiliary Current	CCC	ACUR
Auxiliary Voltage	CCC	AVOL
Emex Voltage	CCC	EVOL
Main Current (AC)	CCC	MCUR
Main Voltage	CCC	MVOL
Amplitude from Mode 1 for Presentation	CMS	AMP1
Amplitude from Mode 2 for Presentation	CMS	AMP2
Amplitude from Mode 3 for Presentation	CMS	AMP3
Amplitude from Mode 4 for Presentation	CMS	AMP4
Negative Noise Sonic Amplitude	CMS	NNOI
Negative Sonic Amplitude for Mode 1	CMS	NSA1
Negative Sonic Amplitude for Mode 2	CMS	NSA2
Negative Sonic Amplitude for Mode 3	CMS	NSA3
Negative Sonic Amplitude for Mode 4	CMS	NSA4

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Positive Noise Sonic Amplitude	CMS	PNOI
Positive Sonic Amplitude for Mode 1	CMS	PSA1
Positive Sonic Amplitude for Mode 2	CMS	PSA2
Positive Sonic Amplitude for Mode 3	CMS	PSA3
Positive Sonic Amplitude for Mode 4	CMS	PSA4
Waveform from Noise Mode	CMS	WFN
Noise Waveform's Depth	CMS	WFND
Noise Waveform's Normalization Factor	CMS	WFNN
Likeness Curve Quadrant 1 Frame-to-Frame	CMTA	LIK1
Likeness Curve Quadrant 2 Frame-to-Frame	CMTA	LIK2
Likeness Curve Quadrant 3 Frame-to-Frame	CMTA	LIK3
Likeness Curve Quadrant 4 Frame-to-Frame	CMTA	LIK4
Likeness Curve Comparing Quadrants 1 and 2	CMTA	LK12
Likeness Curve Comparing Quadrants 2 and 3	CMTA	LK23
Likeness Curve Comparing WF's Quadrants 3 and 4	CMTA	LK34
Likeness Curve Comparing WF's Quadrants 4 and 1	CMTA	LK41
Far CNL Detector Counts	CNL	FCNL
Near Detector Counts	CNL	NCNL
Neutron Porosity	CNL	NPHI
Neutron R0	CNL	NR0
Neutron Ratio (ND/FD)	CNL	NRAT
Raw Neutron Ratio (Near/Far)	CNL	RNRA
Epithermal Neutron Porosity	CNT	ENPH
Epithermal Neutron Ratio	CNT	ENRA
Epithermal Ratio	CNT	ERAT
Epithermal Remote Neutron Porosity	CNT	ERNP
Epithermal Remote Ratio	CNT	ERRA
Far Epithermal CNL Counts	CNT	FECN
Far Thermal CNL Counts	CNT	FTCN
Near Epithermal CNL Counts	CNT	NECN
Near Thermal CNL Counts	CNT	NTCN
Porosity Difference	CNT	PDIF
Remote Epithermal Counts	CNT	RECN
Raw Epithermal Neutron Ratio	CNT	RENR
Raw Epithermal Ratio	CNT	RERA
Raw Epithermal Remote Ratio	CNT	RERR
Remote Thermal CNL Counts	CNT	RTCN
Raw Thermal Neutron Ratio	CNT	RTNR
Raw Thermal Remote Ratio	CNT	RTRR
Status of CNL	CNT	SCNL

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Thermal Far Remote Neutron Porosity	CNT	TFRP
Thermal Far Remote Ratio	CNT	TFRR
Thermal Neutron Porosity	CNT	TNPH
Thermal Neutron Ratio	CNT	TNRA
Thermal Remote Neutron Porosity	CNT	TRNP
Thermal Remote Ratio	CNT	TRRA
Raw Thermal Far Remote Ratio	CNTG	RFRR
Local Computation 1	COMPUTED	LC01
Local Computation 2	COMPUTED	LC02
Local Computation 3	COMPUTED	LC03
Local Computation 4	COMPUTED	LC04
Local Computation 5	COMPUTED	LC05
Local Computation 6	COMPUTED	LC06
Local Computation 7	COMPUTED	LC07
Local Computation 8	COMPUTED	LC08
Local Computation 9	COMPUTED	LC09
Local Computation 10	COMPUTED	LC10
Local Computation 11	COMPUTED	LC11
Local Computation 12	COMPUTED	LC12
Local Computation 13	COMPUTED	LC13
Local Computation 14	COMPUTED	LC14
Local Computation 15	COMPUTED	LC15
Local Computation 16	COMPUTED	LC16
Local Computation 17	COMPUTED	LC17
Local Computation 18	COMPUTED	LC18
Local Computation 19	COMPUTED	LC19
Local Computation 20	COMPUTED	LC20
Local Computation 21	COMPUTED	LC21
Local Computation 22	COMPUTED	LC22
Local Computation 23	COMPUTED	LC23
Local Computation 24	COMPUTED	LC24
One-Way Travel Time from Surface to Depth	COMPUTED	1WAY
Two-Way Travel Time from Surface to Depth	COMPUTED	2WAY
Area of Bit	COMPUTED	ABS
Area of Future Casing	COMPUTED	AFCD
Arrow Position on Film	COMPUTED	AH
Acoustic Impedance	COMPUTED	AIMP
Area of Borehole	COMPUTED	AREA
Apparent Sigma Water	COMPUTED	ASIG
Average Seismic Velocity	COMPUTED	AVGV
Apparent Water Salinity	COMPUTED	AWS

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Bad Hole Indicator	COMPUTED	BADH
Bond Index	COMPUTED	BI
Bond Index Level for Isolation	COMPUTED	BILI
Bulk Volume Water	COMPUTED	BVW
Caliper 1 - Secondary	COMPUTED	C1S
Caliper 2 - Secondary	COMPUTED	C2S
Casing Number 1 Radius	COMPUTED	CAS1
Casing Number 2 Radius	COMPUTED	CAS2
Casing Number 3 Radius	COMPUTED	CAS3
Compressibility, Bulk	COMPUTED	CB
Casing Number 1 Collars and Centralizers - Left Edge	COMPUTED	CC1L
Casing Number 1 Collars and Centralizers - Right Edge	COMPUTED	CC1R
Casing Number 2 Collars and Centralizers - Left Edge	COMPUTED	CC2L
Casing Number 2 Collars and Centralizers - Right Edge	COMPUTED	CC2R
Casing Number 3 Collars and Centralizers - Left Edge	COMPUTED	CC3L
Casing Number 3 Collars and Centralizers - Right Edge	COMPUTED	CC3R
Cluster Index from PARSEL Pass 1	COMPUTED	CLU1
Cluster Index from PARSEL Pass 2	COMPUTED	CLU2
Corrected Time Tics (WST)	COMPUTED	CORT
Cable Speed	COMPUTED	CSPE
Cable Velocity (Up Positive)	COMPUTED	CVEL
Diameter of Invasion	COMPUTED	DI
Dip Value	COMPUTED	DIP
Density R0	COMPUTED	DR0
Drift Curve (WST)	COMPUTED	DRIF
Delta Sigma for TDT Acid Effect	COMPUTED	DSIG
Depth from DSRD	COMPUTED	DSRD
Delta-T Grain from X-plot Porosity	COMPUTED	DTGX
Delta-T Input	COMPUTED	DTIN
Delta-T on Time Measure	COMPUTED	DTTM
EPT Matrix Corrected Porosity	COMPUTED	EMCP
EPT Resistivity of Fluid (Apparent)	COMPUTED	ERFA
Flag for Bad Hole	COMPUTED	FBH
Formation Factor Deep	COMPUTED	FFD
Formation Factor Plot	COMPUTED	FFP
Formation Factor Shallow	COMPUTED	FFS
Flag for Gas	COMPUTED	FGAS
Flag for Hydrocarbon	COMPUTED	FHYD
Fracture Pressure Gradient for an Invading Fluid	COMPUTED	FPGI
Fracture Pressure Gradient for Non Invading Fluids	COMPUTED	FPGN

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Flag for Phimax	COMPUTED	FPMA
Flag for Shale	COMPUTED	FSHA
Flag for SWB	COMPUTED	FSWB
Flag for Volume of Shale	COMPUTED	FVSH
Gas Correction	COMPUTED	GASC
Gas Index	COMPUTED	GI
Gradiomanometer, Corrected	COMPUTED	GRHC
Gamma Ray Shale Index	COMPUTED	GRSI
Hydrocarbon Resistivity Index	COMPUTED	HRI
Hydrocarbon Volume	COMPUTED	HVOL
Hydrocarbon Weight	COMPUTED	HWT
Integrated Hydrocarbon - Thickness	COMPUTED	IHT
Integrated Hydrocarbon	COMPUTED	IHY
Integrated Movable Hydrocarbons	COMPUTED	IMHY
Integration Pips	COMPUTED	IPIP
Integrated Porosity - Thickness	COMPUTED	IPT
Permeability from E4 Chart	COMPUTED	KE4
Permeability to Gas	COMPUTED	KGAS
Drift knee (WST)	COMPUTED	KNEE
Permeability from NML	COMPUTED	KNML
Permeability to Oil	COMPUTED	KOIL
Permeability (from PERM Program)	COMPUTED	KPRM
Permeability (from Timur)	COMPUTED	KTMR
Permeability to Water	COMPUTED	KWTR
Lump Cutoff Flag	COMPUTED	LCF
Lower Ejector Indicator	COMPUTED	LEI
Measured Depth Pips	COMPUTED	MDP
Matrix ID "M"	COMPUTED	MIDM
Matrix ID "N"	COMPUTED	MIDN
Moveable Oil Plot Flag for Quality	COMPUTED	MOPF
Minimum Shale Index	COMPUTED	MSI
Neutron Density Porosity Difference	COMPUTED	NDPD
Neutron Shale Index	COMPUTED	NPSI
Orthogonal Drift	COMPUTED	ODRI
Core Equivalent Porosity Perm	COMPUTED	PCOR
Permeability from Coriband	COMPUTED	PERC
Apparent Total Porosity	COMPUTED	PHIA
TDT Count Rate Porosity	COMPUTED	PHIC
Effective Porosity	COMPUTED	PHIE
Porosity Derived from True Resistivity	COMPUTED	PHIR

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Total Porosity Corrected for Hydrocarbon	COMPUTED	PHIT
Crossplot Porosity	COMPUTED	PHIX
Integranular Porosity	COMPUTED	PHIZ
Porosity Log - Sonic	COMPUTED	PLS
Plug	COMPUTED	PLUG
Pore Pressure Grad. from Fracture Pressure Grad. Input	COMPUTED	PPGI
Poisson's Ratio	COMPUTED	PR
Producibility Function	COMPUTED	PROD
Porosity from RT	COMPUTED	PRT
Bulk Volume Water (Unflushed Zone)	COMPUTED	PSW
Bulk Volume Water (Flushed Zone)	COMPUTED	PSX0
White Stripe Between Arrow Grids	COMPUTED	PUM1
White Stripe Between Arrow Grids	COMPUTED	PUM2
Black Stripe to Identify CYBERDIP	COMPUTED	PUM3
Black Stripe to Identify CYBERDIP	COMPUTED	PUM4
Pore Volume Clay	COMPUTED	QCL
Production Entry Heavy (Phase)	COMPUTED	QEH
Production Entry Light (Phase)	COMPUTED	QEL
Quality Factor	COMPUTED	QFCT
Production - Heavy Phase	COMPUTED	QHP
Production - Light Phase	COMPUTED	QLP
Q Shale	COMPUTED	QS
Resistivity 100 percent Water Bearing	COMPUTED	R0
Raw Sonic (WST)	COMPUTED	RAWS
Reconstructed Bulk Density (SX0=SW)	COMPUTED	RBD
Reconstructed Bulk Density (SX0=1)	COMPUTED	RBD1
Reconstructed Delta-T (SX0=SW)	COMPUTED	RDT
Reconstructed Delta-T (SX0=1)	COMPUTED	RDT1
Reflection	COMPUTED	REFL
Resistivity of Fluid (Apparent)	COMPUTED	RFA
Ratio of Shear Modulus to Compressibility, Bulk	COMPUTED	RGCB
Grain Density Limited	COMPUTED	RHG
Average Grain Density	COMPUTED	RHGA
Formation Grain Density	COMPUTED	RHGF
Grain Density Unlimited	COMPUTED	RHGI
Grain Density from X-Plot Porosity	COMPUTED	RHGX
Apparent Grain Density	COMPUTED	RHOG
Hydrocarbon Density	COMPUTED	RHOH
RHOB Written on a Time Base for Geogram	COMPUTED	RHOT
Density Used to Calculate Overburden Pressure	COMPUTED	RHOV

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Apparent Mud Filtrate Resistivity	COMPUTED	RMFA
Apparent Mud Filtrate Resistivity from X-Plot Porosity	COMPUTED	RMFX
Raw MLL	COMPUTED	RMLL
Root Mean Square Velocity (Seismic)	COMPUTED	RMSV
Computed Reconstructed RHOB (with SX0 - 100 percent)	COMPUTED	RRB1
True Resistivity	COMPUTED	RT
Resistivity of Water (Apparent)	COMPUTED	RWA
Ratio of RWA to RW	COMPUTED	RWAR
Resistivity of Water Apparent from X-plot Porosity	COMPUTED	RWAX
Resistivity of Flushed Zone	COMPUTED	RX0
Sonic Attenuation	COMPUTED	SATT
Single Dip 1 (Linear Dip)	COMPUTED	SD01
Single Dip 2 (Linear Dip)	COMPUTED	SD02
Single Dip 3 (Linear Dip)	COMPUTED	SD03
Single Dip 4 (Linear Dip)	COMPUTED	SD04
Single Dip 5 (Linear Dip)	COMPUTED	SD05
Single Dip 6 (Linear Dip)	COMPUTED	SD06
Single Dip 7 (Linear Dip)	COMPUTED	SD07
Single Dip 8 (Linear Dip)	COMPUTED	SD08
Single Dip 9 (Linear Dip)	COMPUTED	SD09
Single Dip 10 (Linear Dip)	COMPUTED	SD10
Single Dip 11 (Linear Dip)	COMPUTED	SD11
Single Dip 12 (Linear Dip)	COMPUTED	SD12
Single Dip 13 (Linear Dip)	COMPUTED	SD13
Single Dip 14 (Linear Dip)	COMPUTED	SD14
Single Dip 15 (Linear Dip)	COMPUTED	SD15
Single Dip 16 (Linear Dip)	COMPUTED	SD16
Single Dip 17 (Linear Dip)	COMPUTED	SD17
Single Dip 18 (Linear Dip)	COMPUTED	SD18
Single Dip 19 (Linear Dip)	COMPUTED	SD19
Single Dip 20 (Linear Dip)	COMPUTED	SD20
Single Dip 21 (Linear Dip)	COMPUTED	SD21
Single Dip 22 (Linear Dip)	COMPUTED	SD22
Single Dip 23 (Linear Dip)	COMPUTED	SD23
Single Dip 24 (Linear Dip)	COMPUTED	SD24
Single Dip 25 (Linear Dip)	COMPUTED	SD25
Single Dip 26 (Linear Dip)	COMPUTED	SD26
Single Dip 27 (Linear Dip)	COMPUTED	SD27
Single Dip 28 (Linear Dip)	COMPUTED	SD28
Single Dip 29 (Linear Dip)	COMPUTED	SD29
Single Dip 30 (Linear Dip)	COMPUTED	SD30
Single Dip 31 (Linear Dip)	COMPUTED	SD31

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
SARABAND Flag of Altered Data	COMPUTED	SFAD
SARABAND Flag of Shale Indicator	COMPUTED	SFSI
Signature - Geogram Natural Trace	COMPUTED	SGNT
Shale	COMPUTED	SHAL
Shot Depth (WST)	COMPUTED	SHOT
Shot Time (WST)	COMPUTED	SHTM
Computed Silt Index	COMPUTED	SI
Sonic Limit Porosity	COMPUTED	SLP
Signal Multiples (Geogram)	COMPUTED	SMUL
Geogram Multiples only	COMPUTED	SMUO
Sidewall Neutron R0	COMPUTED	SNR0
Secondary Porosity Index	COMPUTED	SPI
Geogram Primaries	COMPUTED	SPRM
Spontaneous Potential Shale Index	COMPUTED	SPSI
Signal Reflection (Geogram)	COMPUTED	SREF
SP Resistivity of Fluid (Apparent)	COMPUTED	SRFA
Shot Level (WST)	COMPUTED	STLV
Sonic Velocity	COMPUTED	SVEL
Water Saturation	COMPUTED	SW
Saturation of Water (Apparent)	COMPUTED	SWA
Bound Water Saturation	COMPUTED	SWB
Saturation of Water Irreducible	COMPUTED	SWI
Ratio Water Saturation	COMPUTED	SWR
Total Water Saturation	COMPUTED	SWT
Sw Computed from TDT	COMPUTED	SWTD
Flushed Zone Water Saturation	COMPUTED	SX0
Flushed Water Saturation Apparent	COMPUTED	SXA
True Azimuth of Pad 1	COMPUTED	TAZ1
True Azimuth of Deviation	COMPUTED	TAZD
Corrected Travel Time (WST)	COMPUTED	TIMC
Tubing Joints & Packer Segments Tubing 1 - Left Edge	COMPUTED	TJ1L
Tubing Joints & Packer Segments Tubing 1 - Right Edge	COMPUTED	TJ1R
Tubing Joints & Packer Segments Tubing 2 - Left Edge	COMPUTED	TJ2L
Tubing Joints & Packer Segments Tubing 2 - Right Edge	COMPUTED	TJ2R
Tubing Joints & Packer Segments Tubing 3 - Left Edge	COMPUTED	TJ3L
Tubing Joints & Packer Segments Tubing 3 - Right Edge	COMPUTED	TJ3R
Tubing Joints & Packer Segments Tubing 4 - Left Edge	COMPUTED	TJ4L
Tubing Joints & Packer Segments Tubing 4 - Right Edge	COMPUTED	TJ4R
Tubing Joints & Packer Segments Tubing 5 - Left Edge	COMPUTED	TJ5L
Tubing Joints & Packer Segments Tubing 5 - Right Edge	COMPUTED	TJ5R

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Time Propagation Matrix (Apparent)	COMPUTED	TPMA
TDT R0	COMPUTED	TR0
Tubing Screens for Tubing Number 1	COMPUTED	TSC1
Tubing Screens for Tubing Number 2	COMPUTED	TSC2
Tubing Screens for Tubing Number 3	COMPUTED	TSC3
Tubing Screens for Tubing Number 4	COMPUTED	TSC4
Tubing Screens for Tubing Number 5	COMPUTED	TSC5
Tubing String Number 1	COMPUTED	TUB1
Tubing String Number 2	COMPUTED	TUB2
Tubing String Number 3	COMPUTED	TUB3
Tubing String Number 4	COMPUTED	TUB4
Tubing String Number 5	COMPUTED	TUB5
True Vertical One Way Time from Surface	COMPUTED	TV1W
True Vertical Two Way Time from Surface	COMPUTED	TV2W
True Vertical Depth	COMPUTED	TVDE
Upper Ejector Indicator	COMPUTED	UEI
Uncorrect time tics (WST)	COMPUTED	UNCO
Volume of Clay	COMPUTED	VCL
Volume of Hydrocarbon	COMPUTED	VH
Volume of Shale from Cross-Plot	COMPUTED	VSCP
Volume of Shale, CNL/RT	COMPUTED	VSCR
Volume of Shale, Delimiter	COMPUTED	VSD
Volume of Shale, Density-Neutron	COMPUTED	VSDN
Volume of Shale, Density-Sonic	COMPUTED	VSDS
Volume of Shale, Gamma-Ray	COMPUTED	VSGR
Volume of Shale	COMPUTED	VSH
Volume of Shale, M-N X-Plot	COMPUTED	VSMN
Volume of Shale, NPHI-RT	COMPUTED	VSNR
Volume of Shale, NPHI-Sonic X-Plot	COMPUTED	VSNS
Volume of Shale, Porosity from Neutron	COMPUTED	VSPN
Volume of Shale, RT	COMPUTED	VSRT
Volume of Shale, SP	COMPUTED	VSSP
Volume of Shale, Sonic-RT	COMPUTED	VSSR
Volume of Water (Bulk)	COMPUTED	VW
Volume of Water (Apparent)	COMPUTED	VWA
Flushed Zone Water Volume	COMPUTED	VWX0
Flushed Water Volume Apparent	COMPUTED	VXA
Water Sigma (Wet)	COMPUTED	WSIG
WST Interval Velocity	COMPUTED	WSTI
RX0/RT	COMPUTED	XORT

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Zero	COMPUTED	ZER2
Force Exerted by Cable on Logging Head	DFE	FORC
Fluid Temperature	DFE	FTEM
Raw Force Exerted by Cable on Logging Head	DFE	RFOR
Double R1 Radius (HDT)	DICHDT	C3
Double R4 Radius (HDT)	DICHDT	C4
Differential Pressure Channel	DIFLOW	DPCH
Flowrate, Gas Channel	DIFLOW	QGCH
Hydrocarbon Channel Flowrate	DIFLOW	QHCH
Flowrate of Liquid Channel	DIFLOW	QLCH
Flowrate, Oil Channel	DIFLOW	QOCH
Flowrate, Water Channel	DIFLOW	QWCH
IL-Deep Conductivity	DIL/ISF	CILD
IL-Medium Conductivity	DIL/ISF	CILM
LL8 Conductivity	DIL/ISF	CLL8
SFL Conductivity	DIL/ISF	CSFL
ILD/ILM Ratio	DIL/ISF	DMRA
IL-Deep Resistivity	DIL/ISF	ILD
IL-Medium Resistivity	DIL/ISF	ILM
LL8-Averaged over 2.5 Feet	DIL/ISF	LL8A
LL8-Unaveraged	DIL/ISF	LL8U
Quick Look Ratio (RX0/RT)	DIL/ISF	QLRA
Raw ILD Conductivity	DIL/ISF	RILD
Raw ILM Conductivity	DIL/ISF	RILM
Raw LL8 Conductivity	DIL/ISF	RLL8
Raw SFL Conductivity	DIL/ISF	RSFL
Raw Short Normal Res.	DIL/ISF	RSN
SFL Averaged over 2.5 Feet	DIL/ISF	SFLA
SFL Unaveraged	DIL/ISF	SFLU
Short Normal	DIL/ISF	SN
IRD Conductivity	DITX	CIRD
IRM Conductivity	DITX	CIRM
IXD Conductivity	DITX	CIXD
IXM Conductivity	DITX	CIXM
IPD Resistivity	DITX	IPD
IRD Resistivity	DITX	IRD
IRM Resistivity	DITX	IRM
IXD Resistivity	DITX	IXD
IXM Resistivity	DITX	IXM

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Raw IRD	DITX	RIRD
Raw IRM	DITX	RIRM
Raw IXD	DITX	RIXD
Raw IXM	DITX	RIXM
Raw SFL Bucking Current	DITX	RSFB
Raw SFC	DITX	RSFC
Raw SFV	DITX	RSFV
SFL Bucking Current	DITX	SFB
SFL Current	DITX	SFC
SFL Voltage	DITX	SFV
Latero-Log Deep (Resistivity)	DLL	LLD
Latero-Log Groningen (Resistivity)	DLL	LLG
Latero-Log Shallow (Resistivity)	DLL	LLS
Raw Latero-Log Deep (Resistivity)	DLL	RLLD
Raw Latero-Log Shallow (Resistivity)	DLL	RLLS
Deep Bucking Current Attenuation	DLT	DBCA
Deep Current (35 HZ) 0 Deg	DLT	DI0
Deep Current (35 HZ) 90 Deg	DLT	DI90
Deep Voltage (35 HZ) 0 Deg	DLT	DV0
Groningen Voltage	DLT	DV1
Deep Voltage (35 HZ) 90 Deg	DLT	DV90
New Power Deep	DLT	NPD
New Power Shallow	DLT	NPS
Power Deep	DLT	PD
Power, Groningen	DLT	PG
Power Shallow	DLT	PS
Raw Deep Current (35 HZ) 0 Deg	DLT	RDIO
Raw Deep Current (35 HZ) 90 Deg	DLT	RDIO9
Raw Deep Voltage (35 HZ) 0 Deg	DLT	RDV0
Raw Groningen Voltage	DLT	RDV1
Raw Deep Voltage (35 HZ) 90 Deg	DLT	RDV9
Raw Power Deep	DLT	RPD
Raw Power Shallow	DLT	RPS
Raw Shallow Current (280 HZ) 0 DEG	DLT	RSIO
Raw Shallow Current (280 HZ) 90 Deg	DLT	RSIO9
Raw Shallow Voltage (280 HZ) 0 DEG	DLT	RSV0
Raw Shallow Voltage (280 HZ) 90 DEG	DLT	RSV9
Shallow Bucking Current Attenuation	DLT	SBCA
Shallow Current (280 HZ) 0 Deg	DLT	SI0
Shallow Current (280 HZ) 90 Deg	DLT	SI90
Shallow Voltage (280 HZ) 0 Deg	DLT	SV0
Shallow Voltage (280 HZ) 90 Deg	DLT	SV90

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Conductivity Laterolog Deep	DLTB	CLLD
Angular Dispersion	DM	AD
Arrow Drift	DM	ADRI
Azimuth of Pad 1	DM	AZI1
Azimuth of Hole Drift	DM	AZIM
Caliper 1 - 3	DM	C1
Caliper 2 - 4	DM	C2
Correlation Curve Resistivity	DM	CCRE
C - D Diametral Shift	DM	CDDS
Cluster/Expansion	DM	CLEX
Closure	DM	CLOS
Combined Quality	DM	CQ
Dip Azimuth	DM	DA
Deviation	DM	DEVI
Hole Dip (apparent dip)	DM	DPAP
Dip Azimuth	DM	DPAZ
Dip Bearing	DM	DPBG
Dip Magnitude (true dip)	DM	DPTR
Emex Scale	DM	EMEX
Fast Channel 0	DM	FC0
Fast Channel 1	DM	FC1
Fast Channel 2	DM	FC2
Fast Channel 3	DM	FC3
Fast Channel 4	DM	FC4
Far Electrode Potential	DM	FEP
Far Electrode Potential 1	DM	FEP1
Far Electrode Potential 2	DM	FEP2
Hole Deviation Azimuth	DM	HDA
Hole Deviation	DM	HDEV
Deviation Azimuth	DM	HLAZ
HDT Status	DM	HSTA
Displacement 1 - 2	DM	HT12
Displacement 1 - 3	DM	HT13
Displacement 2 - 3	DM	HT23
Displacement 2 - 4	DM	HT24
Displacement 3 - 4	DM	HT34
Displacement 4 - 1	DM	HT41
Maximum Likeness	DM	LKMX
Number of Vectors	DM	NOV
Nullified Pad	DM	NP

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Number of Pooled Levels	DM	NPLV
Participation	DM	PART
Planarity	DM	PLAN
Pad Pressure	DM	PP
Potential Computed from FEP1 and FEP2	DM	PTS1
Raw Azimuth	DM	RAZI
Relative Bearing	DM	RB
Reference Check	DM	RC
Raw Caliper 1	DM	RC1
Raw Caliper 2	DM	RC2
Raw DDR Data Block	DM	RDDR
Raw Deviation	DM	RDEV
Reference	DM	REFE
Raw HDT Data Block (CSU)	DM	RHDT
Pass 1 Raw Data Block	DM	RPS1
Raw Relative Bearing	DM	RRB
Speed Correction	DM	SC
Status of HDT	DM	SHDT
Sharpness	DM	SHRP
TTR HDT Raw Data Block	DM	TDIP
Validation Mark of the Sequence	DM	VPS1
Difference in Depth Encoder Depths	DTT	DIFF
EPT Flushed Zone Water Saturation	DWQL	ESXO
Charge Concentration Per Unit Pore Volume	DWRIG	CCPV
Cumulated Volumes from Phi to Third Special Mineral	DWRIG	CVP3
Saturation Bound Water	DWRIG	SBW
Invaded Zone Saturation for DWRIG	DWRIG	SXOT
Upper Limit of DT Theoretical	DWRIG	ULDT
Volume of Bound Water	DWRIG	VBW
Volume of Special Mineral 0	DWRIG	VSM0
Cond. Water Apparent Uncorrected	DWS	CWAU
Porosity Occupied by Bound Waters	DWS	PHIB
Bound Water Saturation from Continuity Constraint	DWS	SBCC
Bound Water Saturation from Sonic Delta T	DWS	SBDT
Bound Water Saturation from the EPT Tool	DWS	SBEP
Bound Water Saturation from an External Source	DWS	SBEX
Bound Water Saturation from the GR/PHIT Relationship	DWS	SBGP
Bound Water Saturation from the LDT Tool	DWS	SBLD
Bound Water Saturation from Neutron & Density Data	DWS	SBND
Bound Water Saturation from the Neutron	DWS	SBNE

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Bound Water Saturation from the NGT Tool	DWS	SBNG
Bound Water Saturation from the NML Tool	DWS	SBNM
Bound Water Saturation from Sigma	DWS	SBSI
Bound Water Saturation Uncorrected	DWS	SWBU
Volume of Clay from EPT Attenuation	DWS	VCEA
Volume of Clay Computed from the Gamma Ray	DWS	VCGR
Volume of Clay Computed from the Hydrocarbon Density	DWS	VCHD
Volume of Clay from Neutron and Density	DWS	VCND
Volume of Clay Computed from the SP	DWS	VCSP
Volume of Dry Clay	DWS	VDCL
Wetness Factor	DWS	WFAC
Computed EPT Matrix	EPT	CEM
EPT Attenuation Gain	EPT	EAG
EPT Attenuation	EPT	EATT
EPT Lossless Propagation Time	EPT	ELPT
EPT Porosity	EPT	EPHI
Electromagnetic Propagation Resistivity	EPT	EPR
Far Signal Level	EPT	FSL
Far Voltage Down	EPT	FVD
Far Voltage Reference	EPT	FVR
Far Voltage Up	EPT	FVU
Near Signal Level	EPT	NSL
Near Voltage Down	EPT	NVD
Near Voltage Reference	EPT	NVR
Near Voltage Up	EPT	NVU
Phase Shift Down	EPT	PSD
Phase Shift Up	EPT	PSU
Raw Hole Diameter	EPT	RHD
Status of EPT	EPT	SEPT
Time of Propagation in Lossy Formation	EPT	TPL
Time Propagation Matrix Computed	EPT	TPMC
Time of Propagation in Water (Lossless)	EPT	TPW0
Log of Frequency of the Cells Used for the Estimation	ESTIME	CFRQ
Density Porosity	FDC	DPHI
Bulk Density Correction	FDC	DRHO
Far FDC Count Rate	FDC	FFDC
Near FDC Count Rate	FDC	NFDC
Panel Bulk Density	FDC	PRHO
Raw Far FDC Count Rate	FDC	RFFD
Bulk Density	FDC	RHOB

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Raw Near FDC Count Rate	FDC	RNFD
Occurrence in the Multi-Dimension Histogram	FDET	OMDH
Adjusted Knee Drift Curve After Manual Mode	GADJST	KDRF
Raw Density	GDRIFT	RRHO
Cumulated Volume from Porosity to Special Mineral 1	GLOBAL	CVP1
Cumulated Volume from Porosity to Special Mineral 2	GLOBAL	CVP2
Cumulated Volume from Porosity to Dolomite	GLOBAL	CVPD
Cumulated Volume from Porosity to Limestone	GLOBAL	CVPL
Cumulated Volume Porosity plus Volume Sand	GLOBAL	CVPS
EPT Attenuation of Mud Filtrate	GLOBAL	EAMF
EPT Attenuation Theoretical Value	GLOBAL	EATH
Measure of EAT Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	EATN
Measure of EAT Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	EATP
Fitting Coefficient of Potassium - NGT	GLOBAL	FCP
Fitting Coefficient of Thorium - GLOBAL	GLOBAL	FCT
Measure of ILD Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	ILDN
Measure of ILD Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	ILDP
Measure of ILM Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	ILMN
Measure of ILM Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	ILMP
Measure of LL7 Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL7N
Measure of LL7 Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL7P
Measure of LL8 Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL8N
Measure of LL8 Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LL8P
Measure of LLD Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LLDN
Measure of LLD Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LLDP
Measure of LLS Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LLSN
Measure of LLS Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	LLSP
Measure of MLL Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	MLLN
Measure of MLL Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	MLLP
Measure of MSF Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	MSFN
Measure of MSF Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	MSFP
Fitting Coefficient of EPT Attenuation	GLOBAL	PEAT
Potassium Minus Standard Deviation- NGT	GLOBAL	PMSD
Potassium Plus Standard Deviation- NGT	GLOBAL	PPSD
Measure of PROX Minus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	PRON
Measure of PROX Plus $\text{SQRT}(\text{SIGMA}^{**2} + \text{TAU}^{**2})$	GLOBAL	PROP
Fitting Coefficient for SIGM from TDT	GLOBAL	PSIG
Fitting Coefficient for SP	GLOBAL	PSP
Potassium Theoretical - GLOBAL	GLOBAL	PT
Fitting Coefficient of the Propagation Time (EPT)	GLOBAL	PTPL
Fitting Coefficient of Photo Electric Cross Section	GLOBAL	PU

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Standard Deviation of EPT Attenuation of Mud Filtrate	GLOBAL	QEAM
Standard Deviation of EPT Attenuation	GLOBAL	QEAT
Standard Deviation on Conductivity given by ILD	GLOBAL	QILD
Standard Deviation on Conductivity given by ILM	GLOBAL	QILM
Standard Deviation on Photo Electric Factor	GLOBAL	QPEF
Standard Deviation on SIGMA TDT	GLOBAL	QSIG
Standard Deviation of Propagation Time (EPT)	GLOBAL	QTPL
Standard Deviation of Propagation Time in Mud Filtrate	GLOBAL	QTPM
Standard Deviation on Photo Electric Cross Section	GLOBAL	QU
Density from Photo Electric Factor	GLOBAL	RPEF
Standard Deviation of Computed Gamma Ray - NGT	GLOBAL	SDCG
Standard Deviation of Potassium - NGT	GLOBAL	SDP
Standard Deviation of Thorium - NGT	GLOBAL	SDT
Standard Deviation of Uranium - NGT	GLOBAL	SDU
Measure of SFL Minus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	SFLN
Measure of SFL Plus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	SFLP
Measure of SIGM Minus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	SIGN
Measure of SIGM Plus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	SIGP
Theoretical SIGMA, Upper Limit	GLOBAL	SIGQ
Theoretical SIGMA, Lower Limit	GLOBAL	SIGT
Thorium Minus Standard Deviation - NGT	GLOBAL	TMSD
Measure of TPL Minus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	TPLN
Measure of TPL Plus $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	TPLP
Theoretical Value of Propagation Time (EPT)	GLOBAL	TPLT
Time of Propagation in Mud Filtrate (EPT-data)	GLOBAL	TPMF
Thorium Plus Standard Deviation - NGT	GLOBAL	TPSD
Thorium Theoretical - GLOBAL	GLOBAL	TTH
Photo Electric Cross Section from LDT	GLOBAL	U
Photo Electric Cross Section for Matrix, Apparent	GLOBAL	UMA
Uranium Minus Standard Deviation - NGT	GLOBAL	UMSD
Photo Electric Cross Section - $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	UN
Photo Electric Cross Section + $\sqrt{\text{SIGMA}^2 + \text{TAU}^2}$	GLOBAL	UP
Uranium Plus Standard Deviation - NGT	GLOBAL	UPSD
Photo Electric Cross Section, Theoretical	GLOBAL	UT
Volume of Dolomite with Respect to Total Volume	GLOBAL	VDOL
Volume of Limestone with Respect to Total Volume	GLOBAL	VLIM
Volume (Fractional) of Mineral 1	GLOBAL	VM1
Volume (Fractional) of Minerals 1 and 2	GLOBAL	VM12
Volume (Fractional) of Mineral 2	GLOBAL	VM2
Volume (Fractional) of Mineral 3	GLOBAL	VM3

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Volume (Fractional) of Special Mineral 1	GLOBAL	VSM1
Volume (Fractional) of Special Mineral 2	GLOBAL	VSM2
Volume (Fractional) of Special Mineral 3	GLOBAL	VSM3
Volume (Fractional) of X (Special) Mineral	GLOBAL	VXM
Raw Gradiomanometer Density	GMS	RGRH
Multiple Reflection Coefficient (Multiple + Primary)	GMULTP	MULT
Multiple Reflection Coefficient Only (Mult - Prim)	GMULTP	MUON
Two Way Travel Time (Relative to the Seismic Reference)	GMULTP	TWOT
Neutron	GNT	NEUT
Raw Neutron	GNT	RNEU
Attenuation Coefficient	GRFLCT	ATTE
Average Velocity between the Time Intervals	GRFLCT	INTV
Synthetic Seismogram Primary	GRFLCT	PRIM
ADC Gain Measurement	GST	ADCG
ADC Zero Measurement	GST	ADCZ
Activated Oxygen Count Rate	GST	AOC
Capture Calcium	GST	CCA
Capture Chlorine	GST	CCHL
Capture Iron	GST	CFE
Capture Hydrogen	GST	CHY
C/O Ratio	GST	COR
Calibration Source Count Rate	GST	CSCR
Capture Silicon	GST	CSI
Gain Latch Setting	GST	GLSE
Gamma Spectroscopy Constant Summary	GST	GSCS
Gamma Spectroscopy Energy Resolution	GST	GSER
Gamma Spectroscopy Head Voltage	GST	GSHV
Gamma Spectroscopy Measure Point	GST	GSMP
Gamma Spectroscopy Prom Program	GST	GSPP
Gamma Spectroscopy Tool Status	GST	GSTS
Inelastic Carbon	GST	IC
Inelastic Calcium	GST	ICA
Inelastic Carbon Windows Count Rate	GST	ICWC
Iron Indicator Ratio	GST	IIR
Inelastic Lithology Indicator Ratio	GST	ILIR
Inelastic Oxygen	GST	IO
Inelastic Oxygen Windows Count Rate	GST	IOWC
Inelastic Silicon	GST	ISI
Lithology Indicator Ratio	GST	LIR
Minitron Status and Voltage	GST	MSAV

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Net Count Rate from Spectrum A	GST	NCRA
Porosity Indicator Ratio	GST	PIR
Pulser Peak Area 1	GST	PPA1
Pulser Peak Area 2	GST	PPA2
Pulser Peak Centroid 1	GST	PPC1
Pulser Peak Centroid 2	GST	PPC2
Pulser Peak Width 1	GST	PPW1
Pulser Peak Width 2	GST	PPW2
Raw Activated Oxygen Count Rate	GST	RAOC
Raw Capture Calcium	GST	RCCA
Raw Capture Chlorine	GST	RCCH
Raw Capture Iron	GST	RCFE
Raw Capture Hydrogen	GST	RCHY
Raw Capture Silicone	GST	RCSI
Raw Inelastic Carbon	GST	RIC
Raw Inelastic Calcium	GST	RICA
Raw Inelastic Carbon Window Count Rate	GST	RICW
Raw Inelastic Oxygen	GST	RIO
Raw Inelastic Oxygen Window Count Rate	GST	RIOW
Raw Inelastic Silicon	GST	RISI
Raw Net Count Rate from Spectrum A	GST	RNCR
Raw Thermal Neutron Decay Time	GST	RTAU
Spectrum A Count Rate	GST	SACR
Spectroscopic Averages Data Block	GST	SADB
Spectrum A Discriminated Count Rate	GST	SADC
Spectrum Accumulation Time	GST	SATI
Spectrum B Count Rate	GST	SBCR
Spectrum B Discriminated Count Rate	GST	SBDC
Spectrum C Count Rate	GST	SCCR
Spectrum C Discriminated Count Rate	GST	SCDC
Spectrum Data Buffer	GST	SDB
Spectroscopic Errors Data Block	GST	SEDB
Salinity Indicator Ratio	GST	SIR
Spectrum Quality Factor 1	GST	SQF1
Spectrum Quality Factor 2	GST	SQF2
Tau Gate 1 Count Rate	GST	TG1C
Tau Gate 2 Count Rate	GST	TG2C
Tau Gate 3 Count Rate	GST	TG3C
Tuffaciousness Indicator Ratio	GST	TIR
Tool Status Data Block	GST	TSDB

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Uncorrected Activated Oxygen Count Rate	GST	UAOC
Windows Carbon/Oxygen Ratio	GST	WCOR
Zero Latch Setting	GST	ZLSE
Activation Chi-Square	GSTA	ACS
Capture Chi-Square	GSTA	CCS
Dead Time Corrected Sigma	GSTA	CSIG
Dead Time Corrected Tau	GSTA	CTAU
Gain Correction Factor	GSTA	GCF
GSTA Tau Quality Factor	GSTA	GTQ
Inelastic Chi-Square	GSTA	ICS
Raw Capture Sulphur	GSTA	RCSU
Sum of Capture Yields in Inelastic Gate	GSTA	SCAP
Averaged Channel 0	HDT	AC0
Averaged Channel 1	HDT	AC1
Averaged Channel 2	HDT	AC2
Averaged Channel 3	HDT	AC3
Averaged Channel 4	HDT	AC4
Average Difference of Fast Dip Channels 1 and 2	HDT	AD12
Average Difference of Fast Dip Channels 2 and 3	HDT	AD23
Average Difference of Fast Dip Channels 3 and 4	HDT	AD34
Average Difference of Fast Dip Channels 4 and 1	HDT	AD41
Difference of NFC1 and NFC2	HDT	D12
Difference of NFC2 and NFC3	HDT	D23
Difference of NFC3 and NFC4	HDT	D34
Difference of NFC4 and NFC1	HDT	D41
Hole Azimuth	HDT	HAZI
Normalized Averaged Channel 1	HDT	NAC1
Normalized Averaged Channel 2	HDT	NAC2
Normalized Averaged Channel 3	HDT	NAC3
Normalized Averaged Channel 4	HDT	NAC4
Normalized Fast Dip Channel 1	HDT	NFC1
Normalized Fast Dip Channel 2	HDT	NFC2
Normalized Fast Dip Channel 3	HDT	NFC3
Normalized Fast Dip Channel 4	HDT	NFC4
Pad 1 Azimuth	HDT	PIAZ
SP Slowed (Delayed)	HDT	SPS
Hewlett Packard Frequency	HPA	HPF
Ones Digit of HP Gauge Pressure	HPA	OHPG
Tens Digit of HP Gauge Pressure	HPA	THPG

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
HDT Average Bedding Thickness	HSLOG	HABT
HDT Average Event Thickness	HSLOG	HAET
HDT Likeness	HSLOG	HLIK
HDT Planarity	HSLOG	HPLA
HDT Resistivity Asymmetry	HSLOG	HRA
HDT Resistivity	HSLOG	HRES
HDT Resistivity Variance	HSLOG	HRV
ILX Susceptibility	ILT	CILX
ILX Resistivity	ILT	ILX
Raw ILX Susceptibility	ILT	RILX
Bulk Volume (Water) for the Previous PML	INCH	BVPP
Bulk Volume Water in the Flushed Zone	INCH	BVSX
Bulk Volume Water for Cased Hole	INCH	BVWC
Bulk Volume Water for Production Management Log	INCH	BVWP
Flag for Coal	INCH	FCOA
Flag for Volume of Shale Method Used by Inch	INCH	FVSI
Integrated Hydrocarbon for Cased	INCH	IHC
Integrated Permeability to Hydrocarbon	INCH	IKH
Integrated Permeability Index Rounded	INCH	IKIR
Integrated Permeability Minimum	INCH	IKM
Integrated Permeability to Water	INCH	IKW
Permeability to Hydrocarbon	INCH	KHYD
Density Hydrocarbon Index	INCH	RHI
Density Hydrocarbon Minimum Index	INCH	RHMI
Residual Oil Saturation	INCH	ROS
Saturation of Water Cased Hole	INCH	SWC
Saturation Water for Production Management Log	INCH	SWPM
Saturation of Water for the Previous PML	INCH	SWPP
TDT PHI Effective	INCH	TPE
Volume of Shale from Normalized PHIT and Sigma	INCH	VSNP
Volume of Shale from Porosity Effective	INCH	VSPE
Volume of Shale from Resistivity to Water Apparent	INCH	VSRW
Volume of Shale from Sigmas and Conductivities	INCH	VSSC
Geothermal Temperature	ITPLOG	GTEM
Velocity (Synthetic)	ITPLOG	VSYN
Depth Adjustment Curve for Lapcur	LAPCUR	DAC
Data Quality Curve for Lapcur	LAPCUR	DQC
Caliper Plus(12) Volts Output	LDT	CPVO
Caliper Zero	LDT	CZ
Caliper Zero Volts Output	LDT	CZVO

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Density Grain (Min-1,Min-2)	LDT	DG12
Density Grain (Min-1,Min-3)	LDT	DG13
Density Grain (Min-2,Min-3)	LDT	DG23
Primary Bulk Density Correction	LDT	DRHP
Expected Grain Density	LDT	EGD
Form Factor for Long Spacing	LDT	FFLS
Form Factor for Short Spacing	LDT	FFSS
Frequency for Long Spacing Control Loop	LDT	FLS
Frequency of Short Spacing Control Loop	LDT	FSS
GD Shale Index	LDT	GDSI
Litholog Window Count Rate	LDT	LITH
Long Lower Window Count Rate	LDT	LL
Long Spacing Computed Count Rate (LL+LU/2)	LDT	LS
Long Spacing High Voltage Output	LDT	LSHV
Long Spacing RHOB (Uncorrected)	LDT	LSRH
Long Upper 1-2 Window Count Rate (LU1+LU2)	LDT	LU
Long Upper 1 Window Count Rate	LDT	LU1
Long Upper 2 Window Count Rate	LDT	LU2
Long Upper RHOB	LDT	LURH
Mineral (3) Proportion Min-1	LDT	MP1
Mineral Proportion Min-2	LDT	MP2
Mineral Proportion Min-3	LDT	MP3
Mineral (3) Proportion Calc	LDT	MPC
Mineral Proportion Dolo	LDT	MPD
Mineral Proportion Quartz	LDT	MPQ
Number, Sequence	LDT	NSEQ
Parity Failures	LDT	PARI
Photo-Electric Factor	LDT	PEF
PN Shale Index	LDT	PNSI
Raw Frequency for Long Spacing Control Loop	LDT	RFLS
Raw Frequency for Short Spacing Control Loop	LDT	RFSS
Raw LITH Count Rate	LDT	RLIT
Raw LL Count Rate	LDT	RLL
Raw Long Spacing Count Rate	LDT	RLS
Raw Long Upper 1 - 2 Count Rate	LDT	RLU
Raw Long Upper 1 Count Rate	LDT	RLU1
Raw Long Upper 2 Count Rate	LDT	RLU2
Raw Short Spacing 1 Count Rate	LDT	RSS1
Raw Short Spacing 2 Count Rate	LDT	RSS2
Raw Transits Long Spacing Loop	LDT	RTLS
Raw Transits Short Spacing Loop	LDT	RTSS

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Short Spacing 1 Density	LDT	S1RH
Short Spacing 2 Density	LDT	S2RH
Secondary Density Porosity	LDT	SDPH
Secondary Delta-RHO	LDT	SDRH
Status LDTC	LDT	SLDT
Secondary Bulk Density (RHO Star)	LDT	SRHO
Short Spacing 1 Window Count Rate	LDT	SS1
Short Spacing 2 Window Count Rate	LDT	SS2
Short Spacing High Voltage Loop Output	LDT	SSHV
Effective Atomic Number Z from LDT	LDT	ZLD
Matrix Density in 2 Mineral Model	LDTQ	MDM2
Alpha (Coefficient in Fracture Pressure Gradient Eqn.)	MECPRO	ALPH
Difference between DT and RDT1 Channels	MECPRO	DDT
Delta Pressure for Invading Fluids	MECPRO	DPRI
Delta Pressure for Noninvading Fluids	MECPRO	DPRN
Delta T Shear Wave Travel Time Reconstructed	MECPRO	DTSR
Effective Radial Stress	MECPRO	ESRA
Effective Tangential Stress	MECPRO	ESTA
Shear Modulus	MECPRO	G
Hydro Static Head at Shear Failure for Invading Fluids	MECPRO	HSHI
Hydro Static Head at Shear Failure (Noninvading Fluids)	MECPRO	HSHN
Initial Shear Strength	MECPRO	ISHE
Overburden Pressure Gradient	MECPRO	OPG
Ratio of Calculated Shear to Compression Travel Time	MECPRO	RCSC
Ratio of Measured Shear and Compressional Travel Times	MECPRO	RMSC
Toughness	MECPRO	TOUG
Uniaxial Compressive Strength	MECPRO	UCS
Youngs Modulus (E)	MECPRO	YME
Accelerometer	MISC.	ACCE
Amplified Short Normal	MISC.	ASN
Bit Size	MISC.	BS
Caliper 2 (Second Caliper in File)	MISC.	CAL2
Caliper	MISC.	CALI
CCL Amplitude	MISC.	CCL
Calibration Half-scale	MISC.	CH
Cable Speed	MISC.	CS
Cartridge Temperature	MISC.	CTEM
Differential Caliper	MISC.	DCAL
Delta Mark	MISC.	DMAR
Delta-SP	MISC.	DSP

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Downhole Status Word	MISC.	DSW
Dummy	MISC.	DUM2
Dummy	MISC.	DUMM
Focussed Conductivity	MISC.	FC
Focussed Resistivity	MISC.	FR
Gamma Ray	MISC.	GR
Hole Diameter	MISC.	HD
Head Voltage	MISC.	HV
Induction Log	MISC.	IL
Large Arm	MISC.	LA
Lateral	MISC.	LAT
Latero-Log 8	MISC.	LL8
Long Normal	MISC.	LN
Magnetic Mark Detector Depth	MISC.	MARK
Micro-Focussed Resistivity	MISC.	MFR
Micro-Inverse Resistivity	MISC.	MINV
Miscellaneous Neutron	MISC.	MNEU
Micro-Normal Resistivity	MISC.	MNOR
Monitor	MISC.	MON
Miscellaneous Time Gate	MISC.	MTG
Perforation Flag	MISC.	PERF
Raw Caliper Data	MISC.	RCAL
Raw Amplitude	MISC.	RCCL
Raw Gamma Ray	MISC.	RGR
Raw Large Arm	MISC.	RLA
Raw Micro-Inverse	MISC.	RMI
Raw Micro-Normal	MISC.	RMN
Raw SP (Without Offset)	MISC.	RSP
Raw Sparc	MISC.	RSPA
Small Arm	MISC.	SA
Status of ATC	MISC.	SATC
Spherically Focussed Log	MISC.	SFL
Spontaneous Potential	MISC.	SP
Sparc	MISC.	SPAR
Spontaneous Potential Milli-Volt	MISC.	SPMV
Spontaneous Potential Volts	MISC.	SPV
Temperature	MISC.	TEMP
Tension	MISC.	TENS
Time per Frame	MISC.	TIME
Uphole Status Word	MISC.	USW

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Velocity	MISC.	VEL
Zero	MISC.	ZERO
MSFL Conductivity	MSFL	CMSF
I1 Conductivity	MSFL	I1
MSFL Resistivity	MSFL	MSFL
Raw I0 (MSFL Conductivity)	MSFL	RI0
Raw I1 Conductivity	MSFL	RI1
Raw MSFL Conductivity	MSFL	RMSF
Raw Differential Temperature	MTS	RDTE
Raw Manometer Pressure	MTS	RMP
Raw Temperature	MTS	RTEM
Neutron Depth Log	NDT	NDL
Raw Neutron Depth Log	NDT	RNDL
1.1 MEV Output	NGT	11ME
150 KEV Output	NGT	150A
150 KEV Output (BIS)	NGT	150B
1.6 MEV Output	NGT	16ME
2 MEV Output	NGT	2ME
3 MEV Output	NGT	3ME
40 KEV Output	NGT	40KE
0.5 MEV Output	NGT	5ME
60 KEV Output	NGT	60KE
80 KEV Output	NGT	80KE
Potassium	NGT	POTA
Raw Potassium Output	NGT	RPOT
Raw Spectroscopy Gamma Ray Output	NGT	RSGR
Raw Stabilization Indicator	NGT	RSTA
Raw Thorium Output	NGT	RTHO
Raw Uranium Output	NGT	RURA
Raw Window 1 - NGT	NGT	RW1N
Raw Window 2 - NGT	NGT	RW2N
Raw Window 3 - NGT	NGT	RW3N
Raw Window 4 - NGT	NGT	RW4N
Raw Window 5 - NGT	NGT	RW5N
Spectroscopy Gamma-Ray	NGT	SGR
Stabilization Indicator	NGT	STAB
Thorium	NGT	THOR
THT High Voltage Output	NGT	THT
Uranium	NGT	URAN

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
V Shale Computed (Spectro) Gamma Ray	NGT	VSCG
V Shale Difference	NGT	VSDI
V Shale Potassium Computed	NGT	VSPC
V-Shale Spectro Gamma Ray Computed	NGT	VSSG
V Shale Thorium Computed	NGT	VSTC
V Shale Uranium Computed	NGT	VSUC
Window 0	NGT	W0
Window 1 (.150 - .5 MEV)	NGT	W1NG
Window 2 (.5 - 1.1 MEV)	NGT	W2NG
Window 3 (1.1 - 1.6 MEV)	NGT	W3NG
Window 4 (1.6 - 2 MEV)	NGT	W4NG
Window 5 (2 - 3 MEV)	NGT	W5NG
Window for Lower Loop (60 - 80 KEV)	NGT	WLL
Window for Upper Loop (40 - 60 KEV)	NGT	WUL
Computed Gamma Ray from Thorium, Uranium, and Potassium	NGTPRE	CGR
Thorium and Potassium Ratio	NGTPRE	TPRA
Thorium and Uranium Ratio	NGTPRE	TURA
Uranium and Potassium Ratio	NGTPRE	UPRA
Amplitude Estimate	NML	AE
Amplitude Estimate, 2nd Cycle	NML	AE2
Amplitude Estimate, 3rd Cycle	NML	AE3
Cable Current	NML	CCUR
Envelope	NML	ENV
Envelope, 2nd Cycle	NML	ENV2
Envelope, 3rd Cycle	NML	ENV3
Free Porosity	NML	FPHI
NML Free Porosity	NML	NFP
Raw Amplitude Estimate	NML	RAE
Raw Amplitude Estimate, 2nd Cycle	NML	RAE2
Raw Amplitude Estimate, 3rd Cycle	NML	RAE3
Raw T2 Signal Decay Time	NML	RT2
Waveform	NML	WAVE
Waveform Depth	NML	WDEP
Waveform Scale	NML	WSCA
Estimate of FFI, 1st cycle	NMTC	FFE1
Estimate of FFI, 2nd cycle	NMTC	FFE2
Estimate of FFI, 3rd cycle	NMTC	FFE3
Free Fluid Index	NMTC	FFI
FFI Estimate A	NMTC	FFIA
FFI Estimate B	NMTC	FFIB

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Free Porosity Estimate, 1st Cycle	NMTC	FPE1
Free Porosity Estimate, 2nd Cycle	NMTC	FPE2
Free Porosity Estimate, 3rd Cycle	NMTC	FPE3
Free Porosity A	NMTC	FPHA
Free Porosity B	NMTC	FPHB
Larmor Frequency	NMTC	LFRE
NML Pulse Number	NMTC	NPN
NML T1 Relaxation Time	NMTC	NT1
Polarization Period	NMTC	PPER
Stationary Depth	NMTC	SDEP
Signal to Noise Ratio	NMTC	STNR
T1 Relaxation Time A	NMTC	T1A
T1 Relaxation Time B	NMTC	T1B
T2 Signal Decay Time	NMTC	T2
Waveform 2	NMTC	WAV2
Waveform 3	NMTC	WAV3
Waveform Envelope, 2ND Cycle	NMTC	WEN2
Waveform Envelope, 3RD Cycle	NMTC	WEN3
Waveform Envelope	NMTC	WENV
Waveform Scale - Second Cycle (2)	NMTC	WSC2
Waveform Scale - Third Cycle (3)	NMTC	WSC3
Conductivity of Water Apparent at Std. Temp (75 F)	PARSEL	CWAS
Hole Rugosity	PARSEL	HRUG
Reconstructed Gamma Ray	PARSEL	REGR
Reconstructed SP	PARSEL	RESP
Bound Water Saturation from CWA Analysis	PARSEL	SBCW
Bound Water Saturation from GR Analysis	PARSEL	SBGR
Bound Water Saturation from SP	PARSEL	SBSP
Digital Data In (Setting)	PAT	DDI
Eddy Currents, Enhanced	PAT	ECEN
Eddy Current, Lower Array	PAT	ECLA
Eddy Current, Upper Array	PAT	ECUA
Flux Leakage, Enhanced	PAT	FLEN
Flux Leakage, Lower Array	PAT	FLLA
Flux Leakage, Upper Array	PAT	FLUA
Raw Eddy Current, Lower Array	PAT	RECL
Raw Eddy Current, Upper Array	PAT	RECU
Raw Flux Leakage, Lower Array	PAT	RFLA
Raw Flux Leakage, Upper Array	PAT	RFLU
Raw Small Arm	PCD	RSA

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Status of PCD	PCD	SPCD
Gravel Pack Flag, Gas	PELOG	GPFG
Gravel Pack Flag, Oil	PELOG	GPFO
Gravel Pack Flag, Water	PELOG	GPFW
Integrated Permeability to Gas	PELOG	IKG
Integrated Permeability to Oil	PELOG	IKO
Integrated Flow Rate of Gas	PELOG	IQG
Integrated Flow Rate of Oil	PELOG	IQO
Permeability, Intrinsic	PELOG	KINT
Producibility Evaluation List Channel 1	PELOG	PL01
Producibility Evaluation List Channel 2	PELOG	PL02
Producibility Evaluation List Channel 3	PELOG	PL03
Producibility Evaluation List Channel 4	PELOG	PL04
Producibility Evaluation List Channel 5	PELOG	PL05
Producibility Evaluation List Channel 6	PELOG	PL06
Producibility Evaluation List Channel 7	PELOG	PL07
Producibility Evaluation List Channel 8	PELOG	PL08
Producibility Evaluation List Channel 9	PELOG	PL09
Producibility Evaluation List Channel 10	PELOG	PL10
Producibility Evaluation List Channel 11	PELOG	PL11
Producibility Evaluation List Channel 12	PELOG	PL12
Flow Rate, Gas Channel	PELOG	QGAS
Flow, Gas Contribution to Total	PELOG	QGC
Flow Rate, Gas from PELOG	PELOG	QGP
Gas Flow Total	PELOG	QGT
Flow, Oil Contribution to Total	PELOG	QOC
Flow Rate, Oil Channel	PELOG	QOIL
Flow Rate, Oil from PELOG	PELOG	QOP
Oil Flow Total	PELOG	QOT
Flow Rate, Water Channel	PELOG	QWAT
Water Flow Total	PELOG	QWT
Relative Permeability to Gas	PELOG	RKG
Relative Permeability to Oil	PELOG	RKO
Relative Permeability to Water	PELOG	RKW
Saturation of Liquid	PELOG	SL
Saturation of Oil	PELOG	SO
Sand Surface Pressure	PELOG	SSPR
Total Flow Contributed by both Gas and Oil	PELOG	TQ
Water Cut Curve	PELOG	WCUT

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Down Speed of Cable Pass Number 1	PEPL	DS01
Down Speed of Cable Pass Number 2	PEPL	DS02
Down Speed of Cable Pass Number 3	PEPL	DS03
Down Speed of Cable Pass Number 4	PEPL	DS04
Down Speed of Cable Pass Number 5	PEPL	DS05
Down Speed of Cable Pass Number 6	PEPL	DS06
Down Speed of Cable Pass Number 7	PEPL	DS07
Down Speed of Cable Pass Number 8	PEPL	DS08
Down Speed of Cable Pass Number 9	PEPL	DS09
Down Speed of Cable Pass Number 10	PEPL	DS10
Down Speed of Cable Pass Number 11	PEPL	DS11
Down Speed of Cable Pass Number 12	PEPL	DS12
Down Speed of Cable Pass Number 13	PEPL	DS13
Down Speed of Cable Pass Number 14	PEPL	DS14
Down Speed of Cable Pass Number 15	PEPL	DS15
Flowmeter Calibration Intercept Down	PEPL	FCID
Flowmeter Calibration Intercept Up	PEPL	FCIU
Flowmeter Calibration Slope for Down Line	PEPL	FCSD
Flowmeter Calibration Slope for Up Line	PEPL	FCSU
Flowmeter Down Pass Number 1	PEPL	FD01
Flowmeter Down Pass Number 02	PEPL	FD02
Flowmeter Down Pass Number 03	PEPL	FD03
Flowmeter Down Pass Number 04	PEPL	FD04
Flowmeter Down Pass Number 05	PEPL	FD05
Flowmeter Down Pass Number 06	PEPL	FD06
Flowmeter Down Pass Number 07	PEPL	FD07
Flowmeter Down Pass Number 08	PEPL	FD08
Flowmeter Down Pass Number 09	PEPL	FD09
Flowmeter Down Pass Number 10	PEPL	FD10
Flowmeter Down Pass Number 11	PEPL	FD11
Flowmeter Down Pass Number 12	PEPL	FD12
Flowmeter Down Pass Number 13	PEPL	FD13
Flowmeter Down Pass Number 14	PEPL	FD14
Flowmeter Down Pass Number 15	PEPL	FD15
Flowmeter Up Pass Number 1	PEPL	FU01
Flowmeter Up Pass Number 02	PEPL	FU02
Flowmeter Up Pass Number 03	PEPL	FU03
Flowmeter Up Pass Number 04	PEPL	FU04
Flowmeter Up Pass Number 05	PEPL	FU05
Flowmeter Up Pass Number 06	PEPL	FU06

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Flowmeter Up Pass Number 07	PEPL	FU07
Flowmeter Up Pass Number 08	PEPL	FU08
Flowmeter Up Pass Number 09	PEPL	FU09
Flowmeter Up Pass Number 10	PEPL	FU10
Flowmeter Up Pass Number 11	PEPL	FU11
Flowmeter Up Pass Number 12	PEPL	FU12
Flowmeter Up Pass Number 13	PEPL	FU13
Flowmeter Up Pass Number 14	PEPL	FU14
Flowmeter Up Pass Number 15	PEPL	FU15
Gradiomanometer Pass Number 1	PEPL	GR01
Gradiomanometer Pass Number 02	PEPL	GR02
Gradiomanometer Pass Number 03	PEPL	GR03
Gradiomanometer Pass Number 04	PEPL	GR04
Gradiomanometer Pass Number 05	PEPL	GR05
Gradiomanometer Pass Number 06	PEPL	GR06
Gradiomanometer Pass Number 07	PEPL	GR07
Gradiomanometer Pass Number 08	PEPL	GR08
Gradiomanometer Pass Number 09	PEPL	GR09
Gradiomanometer Pass Number 10	PEPL	GR10
Gradiomanometer Pass Number 11	PEPL	GR11
Gradiomanometer Pass Number 12	PEPL	GR12
Gradiomanometer Pass Number 13	PEPL	GR13
Gradiomanometer Pass Number 14	PEPL	GR14
Gradiomanometer Pass Number 15	PEPL	GR15
Temperature Channel Number 01	PEPL	TC01
Temperature Channel Number 02	PEPL	TC02
Temperature Channel Number 03	PEPL	TC03
Temperature Channel Number 04	PEPL	TC04
Temperature Channel Number 05	PEPL	TC05
Temperature Channel Number 06	PEPL	TC06
Temperature Channel Number 07	PEPL	TC07
Temperature Channel Number 08	PEPL	TC08
Temperature Channel Number 09	PEPL	TC09
Temperature Channel Number 10	PEPL	TC10
Temperature Channel Number 11	PEPL	TC11
Temperature Channel Number 12	PEPL	TC12
Temperature Channel Number 13	PEPL	TC13
Temperature Channel Number 14	PEPL	TC14
Temperature Channel Number 15	PEPL	TC15

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Up Speed of Cable Pass Number 1	PEPL	US01
Up Speed of Cable Pass Number 2	PEPL	US02
Up Speed of Cable Pass Number 3	PEPL	US03
Up Speed of Cable Pass Number 4	PEPL	US04
Up Speed of Cable Pass Number 5	PEPL	US05
Up Speed of Cable Pass Number 6	PEPL	US06
Up Speed of Cable Pass Number 7	PEPL	US07
Up Speed of Cable Pass Number 8	PEPL	US08
Up Speed of Cable Pass Number 9	PEPL	US09
Up Speed of Cable Pass Number 10	PEPL	US10
Up Speed of Cable Pass Number 11	PEPL	US11
Up Speed of Cable Pass Number 12	PEPL	US12
Up Speed of Cable Pass Number 13	PEPL	US13
Up Speed of Cable Pass Number 14	PEPL	US14
Up Speed of Cable Pass Number 15	PEPL	US15
Relative Permeability to Hydrocarbon	PERMS	RKH
Status of PGT	PGS	SPGT
Analog 0 for PIM	PIM	A0P
Analog 10 for PIM	PIM	A10P
Analog 12 for PIM	PIM	A12P
Analog 13 for PIM	PIM	A13P
Analog 14 for PIM	PIM	A14P
Analog 1 for PIM	PIM	A1P
Analog 2 for PIM	PIM	A2P
Analog 3 for PIM	PIM	A3P
Analog 4 for PIM	PIM	A4P
Analog 5 for PIM	PIM	A5P
Analog 6 for PIM	PIM	A6P
Analog 8 for PIM	PIM	A8P
Counter 0 for PIM	PIM	C0P
Counter 1 for PIM	PIM	C1P
Counter 2 for PIM	PIM	C2P
Counter 3 for PIM	PIM	C3P
Raw Analog 0 for PIM	PIM	RA0P
Raw Analog 10 (Multi-Gain)	PIM	RA10
Raw Analog 12 (Fast)	PIM	RA12
Raw Analog 13 (Fast)	PIM	RA13
Raw Analog 14 (Fast)	PIM	RA14
Raw Analog 1 for PIM	PIM	RA1P
Raw Analog 2 for PIM	PIM	RA2P

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Raw Analog 3 for PIM	PIM	RA3P
Raw Analog 4 for PIM	PIM	RA4P
Raw Analog 5 for PIM	PIM	RA5P
Raw Analog 6 for PIM	PIM	RA6P
Raw Analog 8 for PIM	PIM	RA8P
Raw Counter 0 for PIM	PIM	RC0P
Raw Counter 1 for PIM	PIM	RC1P
Raw Counter 2 for PIM	PIM	RC2P
Raw Counter 3 for PIM	PIM	RC3P
Differential Temperature	PL	DTEM
Fractional Part of HP Gauge Pressure	PL	FHPG
Gradio Density	PL	GRHO
Gamma Ray (SGT-N)	PL	GRSG
Gamma Ray (TET-D)	PL	GRTE
HP Gauge Pressure	PL	HGP
Integral Part of HP Gauge Pressure	PL	IHPG
Manometer Pressure	PL	MP
Raw Spinner Speed	PL	RSP
Spinner Speed	PL	SPIN
Water Slip Velocity	PL	VS
Gas Holdup	PL	YG
Heavy Phase Holdup	PL	YH
Light Phase Holdup	PL	YL
Oil Holdup	PL	YO
Integrated Gradiomanometer	PLIEDI	IGRH
Mixture RHO	PLIEDI	MRHO
Flowrate, Total Best Probable Answer	PLIEDI	QBT
DT in Normal Pressure Shales	PORPRS	DTNP
Pore Pressure Gradient from Resistivity	PORPRS	PPGR
Pore Pressure Gradient from Sonic	PORPRS	PPGS
RT in Normal Pressure Shales	PORPRS	RTNP
Flow Rate Entry, Total	PRDLOG	QET
Flow Rate, Total	PRDLOG	QT
Adaptive Gain From Stochastic NGT Filtering	PRENGT	AGN
Chi Square of FIT W.R.T. the Counts - NGT	PRENGT	CHI
Ratio of Window 1 Counts to Window 2 Counts for Barite	PRENGT	RW12
Thorium, Potassium Cross Correlation (NGT)	PRENGT	TPCC
Thorium, Uranium Cross Correlation (NGT)	PRENGT	TUCC
Uranium, Potassium Cross Correlation (NGT)	PRENGT	UPCC

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Window 1 Counts Minus One Standard Deviation (NGT)	PRENGT	W1MS
Window 1 Counts Plus One Standard Deviation (NGT)	PRENGT	W1PS
Window 2 Counts Minus One Standard Deviation (NGT)	PRENGT	W2MS
Window 2 Counts Plus One Standard Deviation (NGT)	PRENGT	W2PS
Window 3 Counts Minus One Standard Deviation (NGT)	PRENGT	W3MS
Window 3 Counts Plus One Standard Deviation (NGT)	PRENGT	W3PS
Window 4 Counts Minus One Standard Deviation (NGT)	PRENGT	W4MS
Window 4 Counts Plus One Standard Deviation (NGT)	PRENGT	W4PS
Window 5 Counts Minus One Standard Deviation (NGT)	PRENGT	W5MS
Window 5 Counts Plus One Standard Deviation (NGT)	PRENGT	W5PS
Background Ratio for GST-A/IGT Background Normalization	PRESS	BRAT
Capture Chi-Square from GST-A/IGT Spectral Fit	PRESS	CCHI
Capture Gain for GST-A/IGT Spectrum Correction	PRESS	CGAI
Capture Offset for GST-A/IGT Spectrum Correction	PRESS	COFF
Capture Sulphur from GST-A/IGT Spectral Fit	PRESS	CSUL
Differential Non-Linearity Number of GST-A/IGT ADC'S	PRESS	DNLN
Hydrogen Centroid for GST-A/IGT Spectrum Calibration	PRESS	HCEN
Inelastic Activation	PRESS	IACT
Inelastic/Capture Mode 1 Ratio from GST-A/IGT Spectrum	PRESS	IC1R
Inelastic Chi-Square from GST-A/IGT Spectral Fit	PRESS	ICHI
Inelastic Chlorine Weight from GST-A/IGT Spectrum	PRESS	ICHL
Inelastic Iron Weight from GST-A/IGT Spectrum	PRESS	IFE
Inelastic Gain for GST-A/IGT Spectrum Correction	PRESS	IGAI
Inelastic Offset for GST-A/IGT Spectrum	PRESS	IOFF
Porosity EPT Dolomite	PRESS	PEDO
Porosity EPT Limestone	PRESS	PELI
Porosity EPT Sandstone	PRESS	PESA
Pileup in GST-A/IGT Spectrum	PRESS	PILE
Proportion of Mineral 1 in Formation Matrix (LDT)	PRESS	PM1
Proportion of Mineral 2 in Formation Matrix (LDT)	PRESS	PM2
Proportion of Mineral 3 in Formation Matrix (LDT)	PRESS	PM3
Residual Capture Inelastic Fit for GST-A/IGT	PRESS	RCIF
Shift at Channel 140 of GST-A/IGT Spectrum after Gain-O	PRESS	S140
Zinc Centroid for GST-A/IGT Spectrum Calibration	PRESS	ZCEN
The Computed Anti-log of SP/K which Equals RMF/RW	PRINCE	ASP
The Chart Number Wsed for TDT-K to Determine TPHI	PRINCE	CTDT
Conductivity of Water, Apparent	PRINCE	CWA
PHIT Flag Indicating Method Used for Computation	PRINCE	PHIF
Saturation of Gas in the Matrix as Determined by PHIC	PRINCE	SG
Sigma Water Free Reconstructed from Open Hold Data	PRINCE	SWFR

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONI
Projection of the Logs onto the Principal Axes	PROJEC	PCLG
PCLOG Divided by Square Root of Associated Eigen Value	PROJEC	PSLG
MLL Conductivity	PROX/MLL	CMLL
PROX Conductivity	PROX/MLL	CPRO
MLL Resistivity	PROX/MLL	MLL
PROX Resistivity	PROX/MLL	PROX
Raw PROX Conductivity	PROX/MLL	RPRO
Formation Volume Factor of Gas	PVTANA	BGAS
Formation Volume Factor of Oil	PVTANA	BOIL
Bubble Point Pressure	PVTANA	BPPR
Formation Volume Factor of Water	PVTANA	BWAT
Compressibility of Gas	PVTANA	CGAS
Compressibility of Oil	PVTANA	COIL
Compressibility of Water	PVTANA	CWAT
Flow Regime Indicator	PVTANA	FREG
Gas Gravity (or Density)	PVTANA	GGRA
Gas/Liquid Superficial Tension	PVTANA	GLST
Gas/Oil Superficial Tension	PVTANA	GOST
Gas Viscosity	PVTANA	GVIS
Gas/Water Superficial Tension	PVTANA	GWST
Liquid Density	PVTANA	LRHO
Liquid Viscosity	PVTANA	LVIS
Oil/Liquid Fraction	PVTANA	OLF
Oil Density	PVTANA	ORHO
Oil Viscosity	PVTANA	OVIS
Pressure Gradient	PVTANA	PGRA
Ratio of Gas in Solution in Oil	PVTANA	RSGO
Ratio of Gas in Solution in Water	PVTANA	RSGW
Superficial Gas Velocity	PVTANA	SGV
Superficial Liquid Velocity	PVTANA	SLV
Water Density	PVTANA	WRHO
Water Viscosity	PVTANA	WVIS
Liquid Holdup	PVTANA	YLI
RCT Status	RCT	RCTS
Downhole Motor Volts	RFT	DMV
Elapsed Time	RFT	ETIM
Horner Gas Slope	RFT	HGS
HP Gauge Input Frequency	RFT	HPGI
Hundreds SGP Digit (Display)	RFT	HSGP
Horner Slope	RFT	HSLO
Horner Time Function	RFT	HTF

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Lower Sample Open Valve 2 Signal	RFT	LSAM
M (=1000) SGP Digit (Display)	RFT	MSGP
Motor Speed	RFT	MSPE
One's SGP Digit (Display)	RFT	OSGP
Pressure Digit 10,000's	RFT	PD10
Pressure Digit 20,000's	RFT	PD20
Pressure Fraction	RFT	PFRA
Pressure 100's Digit	RFT	PHUN
Pump Motor Current	RFT	PMCU
Pressure 1's Digit	RFT	PONE
Analog Pressure	RFT	PRES
Pressure 10's Digit	RFT	PTEN
Pressure 1000's Digit	RFT	PTHO
Raw Analog Pressure	RFT	RAPR
RFT Downhole Status Word	RFT	RDSW
Raw HP Gauge Temperature	RFT	RHPT
Raw Pressure 100's Digit	RFT	RPHU
Raw Pressure 1's Digit	RFT	RPON
Raw Pressure	RFT	RPRE
Raw Pressure 10's Digit	RFT	RPTE
Raw Pressure 1000's Digit	RFT	RPTH
Raw Strain Gauge Pressure	RFT	RSGP
Seal Signal	RFT	SEAL
Strain Gauge Pressure	RFT	SGP
Spherical Gas Slope	RFT	SGS
Smoothed Strain Gauge Pressure	RFT	SSGP
Spherical Slope	RFT	SSLO
Spherical Time Function	RFT	STF
Tens SGP Digit (Display)	RFT	TSGP
Uphole Motor Volts	RFT	UMV
Upper Sample Open Valve 1 Signal	RFT	USAM
HP Gauge Digital Pressure	RFT/HPA	HPGD
Apparant Salinity	SARLOG	ASAL
Perm Index (KI) Rounded off in Significant Figures	SARLOG	KIR
Original Shale Flag (Before L and W Logic)	SARLOG	OSF
Original X0 Flag (Flag Showing Modifications of SX0)	SARLOG	OXF
Resistivity Mud Filtrate Ratio (RMFA/RMF)	SARLOG	RMFR
Multi-Gain Waveform 1	SDC	MGW1
Multi-Gain Waveform 2	SDC	MGW2
Multi-Gain Waveform 3	SDC	MGW3
Multi-Gain Waveform 4	SDC	MGW4

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Interval Transit Time	SDIC	INTT
Raw Gamma Ray (SGT-N)	SGT	RGRS
Correction Factor of Deep Log	SHO	CFD
Correction Factor of Shallow Log	SHO	CFS
Latero-Log Deep Error Correction	SHO	LLDE
LLD Rectangular Log	SHO	LLDR
Latero-Log Shallow Error Correction	SHO	LLSE
LLS RECTANGULAR LOG	SHO	LLSR
Gravel Pack Channel for Left Side of Well	SKETCH	GPLS
Gravel Pack Channel for Right Side of Well	SKETCH	GPRS
Zero Phase Shot Alignment	SKETCH	ZPSA
Transit Time Integration (Cumulative)	SLTJ	TTIC
Raw Sidewall Neutron Detector	SNP	RSND
Sidewall Neutron Detector	SNP	SND
Sidewall Neutron Porosity	SNP	SNP
Amplitude from E2	SONIC	AMPL
E1 Amplitude for CBL	SONIC	CBL
Delta-T	SONIC	DT
Delta T Long Spacing	SONIC	DTL
Integrated Transit Time	SONIC	ITT
Noise	SONIC	NOIS
Sonic Amplitude from Subcycle 1	SONIC	SA1
Sonic Amplitude from Subcycle 2	SONIC	SA2
Sonic Porosity	SONIC	SPHI
Sonic R0	SONIC	SR0
Sonic Ratio (Near-to-Far Amplitudes)	SONIC	SRAT
T0 Amplitude	SONIC	T0
Transit Time	SONIC	TT
Transit Time from Subcycle 1	SONIC	TT1
Transit Time from Subcycle 2	SONIC	TT2
Transit Time from Subcycle 3	SONIC	TT3
Transit Time from Subcycle 4	SONIC	TT4
Waveform 1	SONIC	WF1
Waveform 1 Depth	SONIC	WF1D
Waveform 1 Normalization Factor	SONIC	WF1N
Waveform 2	SONIC	WF2
Waveform 2 Depth	SONIC	WF2D
Waveform 2 Normalization Factor	SONIC	WF2N
Waveform 3	SONIC	WF3
Waveform 3 Depth	SONIC	WF3D

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Waveform 3 Normalization Factor	SONIC	WF3N
Waveform 4	SONIC	WF4
Waveform 4 Depth	SONIC	WF4D
Waveform 4 Normalization Factor	SONIC	WF4N
Pressure, Surface	SPRO	PSUR
Pressure of Well	SPRO	PW
Temperature of Well	SPRO	TW
MSFL Corrected for Borehole Effect	SRT	MSFC
Fractional Volume of Tar	TAR	FVT
Fractional Weight of Dry Clay	TAR	FWDC
Fractional Weight of Sand	TAR	FWSA
Fractional Weight of Silt	TAR	FWSI
Fractional Weight of Dry Solid Materials	TAR	FWSM
Fractional Weight of Tar	TAR	FWT
Fractional Weight of Total Water	TAR	FWTW
Mill Grade Feed Flag (1.=Feed Grade, 0.=Not Feed Grade)	TAR	MGFF
Ratio Wt of Dry Clay to Wt of Solids	TAR	RDCS
Ratio of Silt to Solids	TAR	RSS
Ratio of Matrix Sand to Solids	TAR	RSSO
Ratio Weight of Tar to Weight of Dry Solids	TAR	RWTS
Background, Near Gates	TDT	BACK
Far 1st Gate	TDT	F1
Far 10th Gate	TDT	F10
Far 11th Gate	TDT	F11
Far 12th Gate	TDT	F12
Far 13th Gate	TDT	F13
Far 14th Gate	TDT	F14
Far 15th Gate	TDT	F15
Far 16th Gate	TDT	F16
Far Detector Gate 1 Count Rate	TDT	F1TD
Far 2nd Gate	TDT	F2
Far Detector Gate 2 Count Rate	TDT	F2TD
Far 3rd Gate	TDT	F3
Far Detector Gate 3 Count Rate	TDT	F3TD
Far 4th Gate	TDT	F4
Far 5th Gate	TDT	F5
Far 6th Gate	TDT	F6
Far 7th Gate	TDT	F7
Far 8th Gate	TDT	F8
Far 9th Gate	TDT	F9

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Far Background	TDT	FBAC
Far Quotient ($F1/2 \cdot F2$)	TDT	FQ
Far Sigma (Neutron Capture Cross Section)	TDT	FSIG
Far Thermal Neutron Decay Time	TDT	FTAU
Far TDTM Count Rate	TDT	FTDT
Gates Scaling Factor	TDT	GSF
Near 1st Gate	TDT	N1
Near 10th Gate	TDT	N10
Near 11th Gate	TDT	N11
Near 12th Gate	TDT	N12
Near 13th Gate	TDT	N13
Near 14th Gate	TDT	N14
Near 15th Gate	TDT	N15
Near 16th Gate	TDT	N16
Near Detector Gate 1 Count Rate	TDT	N1TD
Near 2nd Gate	TDT	N2
Near Detector Gate 2 Count Rate	TDT	N2TD
Near 3rd Gate	TDT	N3
Near Detector Gate 3 Count Rate	TDT	N3TD
Near 4th Gate	TDT	N4
Near 5th Gate	TDT	N5
Near 6th Gate	TDT	N6
Near 7th Gate	TDT	N7
Near 8th Gate	TDT	N8
Near 9th Gate	TDT	N9
Near Quotient ($N1/2 \cdot N2$)	TDT	NQ
Near TDTM Count Rate	TDT	NTDT
Porosity from TDT-K	TDT	PHIK
Raw Far 1st Gate	TDT	RF1
Raw Far 10th Gate	TDT	RF10
Raw Far 11th Gate	TDT	RF11
Raw Far 12th Gate	TDT	RF12
Raw Far 13th Gate	TDT	RF13
Raw Far 14th Gate	TDT	RF14
Raw Far 15th Gate	TDT	RF15
Raw Far 16th Gate	TDT	RF16
Raw Far Detector Gate 1 Count Rate	TDT	RF1T
Raw Far 2nd Gate	TDT	RF2
Raw Far Detector Gate 2 Count Rate	TDT	RF2T
Raw Far 3rd Gate	TDT	RF3

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Raw Far Detector Gate 3 Count Rate	TDT	RF3T
Raw Far 4th Gate	TDT	RF4
Raw Far 5th Gate	TDT	RF5
Raw Far 6th Gate	TDT	RF6
Raw Far 7th Gate	TDT	RF7
Raw Far 8th Gate	TDT	RF8
Raw Far 9th Gate	TDT	RF9
Raw Far Thermal Neutron Decay Time	TDT	RFTA
Raw Near 1st Gate	TDT	RN1
Raw Near 10th Gate	TDT	RN10
Raw Near 11th Gate	TDT	RN11
Raw Near 12th Gate	TDT	RN12
Raw Near 13th Gate	TDT	RN13
Raw Near 14th Gate	TDT	RN14
Raw Near 15th Gate	TDT	RN15
Raw Near 16th Gate	TDT	RN16
Raw Near Detector Gate 1 Count Rate	TDT	RN1T
Raw Near 2nd Gate	TDT	RN2
Raw Near Detector Gate 2 Count Rate	TDT	RN2T
Raw Near 3rd Gate	TDT	RN3
Raw Near Detector Gate 3 Count Rate	TDT	RN3T
Raw Near 4th Gate	TDT	RN4
Raw Near 5th Gate	TDT	RN5
Raw Near 6th Gate	TDT	RN6
Raw Near 7th Gate	TDT	RN7
Raw Near 8th Gate	TDT	RN8
Raw Near 9th Gate	TDT	RN9
Raw Sigma	TDT	RSIG
Raw TDTK Ratio (Near/Far)	TDT	RTRA
Capture Cross-Section of the Second TDT Run	TDT	SIG2
Sigma (Neutron Capture Cross Section)	TDT	SIGM
Sigma Variation between Two TDT Runs	TDT	SIGV
Status of TDTM	TDT	STDT
Neutron Decay Time Constant	TDT	TAU
Decay Time of the Second TDT Run	TDT	TAU2
TAU Low	TDT	TL
TDT Porosity	TDT	TPHI
Ratio of the Second TDT Run	TDT	TRA2
TDT Ratio	TDT	TRAT
Uncorrected Far Gate 1 of TDTK	TDT	UFIT

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Uncorrected Near Gate 1 of TDTK	TDT	UNIT
Head Voltage for TDTM	TDTM	HVTD
TDTM->TDTK Far Gate1 Countrate	TDTM	KF1T
TDTM->TDTK Far Gate2 Countrate	TDTM	KF2T
TDTM->TDTK Far Gate3 Countrate	TDTM	KF3T
TDTM->TDTK Near Gate1 Countrate	TDTM	KN1T
TDTM->TDTK Near Gate2 Countrate	TDTM	KN2T
TDTM->TDTK Near Gate3 Countrate	TDTM	KN3T
TDTM->TDTK Near Quality Factor	TDTM	KNQ
TDTM->TDTK Capture Cross-Section	TDTM	KSIG
TDTM->TDTK Neut. Decay Time Constant	TDTM	KTAU
TDTM->TDTK Near/Far Ratio	TDTM	KTRA
TDTM->TDTK Uncorrected F.Gate1 C.Rate	TDTM	KUF1
TDTM->TDTK Uncorrected N.Gate1 C.Rate	TDTM	KUN1
Raw Far TDTM Count Rate	TDTM	RFTD
Raw Near TDTM Count Rate	TDTM	RNTD
Raw Gamma Ray (from) TETD	TET	RGRT
Measured Depth along borehole	TVD	MDEP
Course Length - Horizontal Drift of a Deviated Well	TVDCPI	CL
East West Drift Component	TVDCPI	EWDR
Measured Depth - TVD	TVDCPI	MD
North South Drift	TVDCPI	NSDR
Vertical Depth Channel	TVDCPI	VDEP
Anhydrite Facies	TYPOL	ANHY
Anhydritic Rocks	TYPOL	AROC
Bituminous Rocks Facies	TYPOL	BITU
Coal Facies	TYPOL	CFAC
Coarse-Grain Sandstones	TYPOL	CGSA
Claystones Facies	TYPOL	CLAY
Conglomerate Facies	TYPOL	CONG
Clayey Rocks	TYPOL	CROC
Distance to Barycenter of Lithofacies	TYPOL	DBLI
Disconformity Facies	TYPOL	DISC
Dolomitic Limestones Facies	TYPOL	DLIM
Dolomites Facies	TYPOL	DOLO
Fine-Grain Sandstones	TYPOL	FGSA
Gap Zones	TYPOL	GAP
Gas-Bearing Sandstones	TYPOL	GBSA
Glaucinitic Rocks	TYPOL	GLAU
Gas-bearing Sandstones	TYPOL	GSAN

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Gypsum Facies	TYPOL	GYPS
Igneous Rocks Facies	TYPOL	IGNE
Indurated Shales Facies	TYPOL	INDU
Knobly Rocks	TYPOL	KROC
Limestones Facies	TYPOL	LIME
Lithofacies Permeability	TYPOL	LK
Lithofacies Number	TYPOL	LNUM
Lithofacies Porosity	TYPOL	LPHI
Massive Limestones Facies	TYPOL	MLIM
Quartzites Facies	TYPOL	QUAR
Sandy Rocks Facies	TYPOL	SAND
Salt Facies	TYPOL	SFAC
Shelly Rocks Facies	TYPOL	SHEL
Siliceous Rocks	TYPOL	SILI
Silt Facies	TYPOL	SILT
Sylvinite Facies	TYPOL	SYLV
Amplitude 1 (of Spectrum in VSP)	VSP	AM1
Autocorrelation 1 (in VSP)	VSP	AU1
Break Time in VSP/WST	VSP	BTIM
Downhole 1 for VSP/WST	VSP	D1
Downhole 1 Stack for VSP/WST	VSP	D1S
Level 1 data for VSP/WST	VSP	L1
Phase 1 (of Spectrum in VSP)	VSP	P1
Surface 1 for VSP/WST	VSP	S1
Surface 1 Stack for VSP/WST	VSP	S1S
Seismic Data 32	VSP	SD32
Seismic Data 33	VSP	SD33
Seismic Data 34	VSP	SD34
Seismic Data 35	VSP	SD35
Seismic Data 36	VSP	SD36
Seismic Data 37	VSP	SD37
Seismic Data 38	VSP	SD38
Seismic Data 39	VSP	SD39
Seismic Data 40	VSP	SD40
Seismic Data 41	VSP	SD41
Seismic Data 42	VSP	SD42
Seismic Data 43	VSP	SD43
Seismic Data 44	VSP	SD44
Seismic Data 45	VSP	SD45
Seismic Data 46	VSP	SD46

LOG INFORMATION STANDARD

SORTED BY TOOL

NAME	TOOL	MNEMONIC
Seismic Data 47	VSP	SD47
Seismic Data 48	VSP	SD48
Seismic Data 49	VSP	SD49
Seismic Data 50	VSP	SD50
Shot Number for VSP/WST	VSP	SNUM
Adjusted Sonic Travel Time	WST	ADJS
Block Shift Between Shots or Knee	WST	BLSH
Safety Signal from Hydraulic System	WST	SAFE
Vertical Depth Relative to KB	WST	VDKB
Compressor Pressure	WSTLIS	CPRE
Data File Id	WSTLIS	DFI
Elevation (Source)	WSTLIS	ELEV
Offset Azimuth (Source)	WSTLIS	OAZI
Offset Distance from Well (Source)	WSTLIS	ODFW
Stack Catalogue	WSTLIS	SCAT
Source Distance Below Surface	WSTLIS	SDBS
Sample Rate Downhole Sensor	WSTLIS	SRDS
Sample Rate Surface Sensor	WSTLIS	SRSS
Shot Time Day	WSTLIS	STD
Shot Time Hour	WSTLIS	STH
Shot Time Minute	WSTLIS	STM
Time of First Downhole Datum	WSTLIS	TOFD
Time of First Surface Datum	WSTLIS	TOFS
Transit Time	WSTLIS	TTIM

APPENDIX D

UNIT MNEMONICS

UNIT	MNEMONIC
Absolute pounds per square inch	APSI
Acceleration divided by that of the earth's surface	G's
Acre foot	ACFT
API gravity	DAPI
Atmosphere (kilogram per square centimeter)	ATM
Atmosphere per meter	AT/M
BAR (one million dynes per square centimeter)	BAR
Barns per volume	B/V
Barrel	BBL
Barrel per acre foot	B/AF
Barrel per day	BB/D
Barrels per acre	BB/A
Barrels per day per foot	B/DF
British thermal unit	BTU
BTU per foot X sec	BTFS
BTU per pound	BT/L
Calorie (gram)	CAL
Calories per CM X sec	CACS
Calories per gram	CA/G
Capture unit	CU
Centimeter	CM
Centipoise	CP
Concentration of charge in millieq. per cubic cent.	M/C3
Count rate ratio (CNL)	C/C
Counts per second	CPS
Cubic centimeter	C3
Cubic feet per barrel (GOR)	F3/B
Cubic foot	F3
Cubic meter	M3
Cubic meter per cubic meter (GOR)	V/V
Cubic meter per day	M3/D
Cubic meter per day per meter	M3DM
Cubic meter per second	M3/S
Cubic meter per ton	M3/T
Cubic meters per square meter	M3M2
Day	D
Decanewton	DAN
Decibel	DB
Decibel per foot	DB/F

LOG INFORMATION STANDARD

Decibel per meter	DB/M
Degree	DEG
Degree celsius (centigrade)	DEGC
Degree celsius per meter	DC/M
Degree fahrenheit	DEGF
Degree fahrenheit per foot	DF/F
Degree Kelvin	DEGK
Degrees centigrade per kilometer	DC/K
Degrees fahrenheit per one hundred feet	DFHF
Dimensionless	----
Dimensionless pressure	P/PC
Dimensionless temperature	T/TC
Dyne per centimeter	D/CM
E-06 Reciprocal pounds per square inch	RPSI
E06 Pounds per square inch	6PSI
E12 Pounds per square inch squared	PS12
Elemental ratio	E/E
Elemental weight	E/TE
Exa Pascals squared	EPA2
Feet (prefer over FT)	F
Feet / second * grams / CC	FSGC
Feet per hour	F/HR
Feet per second	FT/S
Feet per second (prefer over FT/S)	F/S
Foot	FT
Foot per minute	F/MN
Foot per sec square	F/S2
Fractional weight	W/W
Gallon per ton	G/T
Gamma ray API	GAPI
Gigapascal	GPA
Gram	G
Grams per cubic centimeter	G/C3
Gravity relative to air	/AIR
Gravity relative to water	/WAT
Hectare meter	HAM
Hertz	HZ
Hour	HR
Hydrogen index	HI
Inch	IN
Inverse feet	FT-1
Inverse gram	G-1
Inverse grams	/G
Inverse kilogram	KG-1
Inverse kilograms	/KG
Inverse meters	M-1
Inverse pounds	/LB

LOG INFORMATION STANDARD

Inverse pounds	LB-1
Joule	J
Kiloparts per million	KPPM
Kilo - electron - volts	KEV
Kilogram	KG
Kilograms per cubic meter	K/M3
Kilograms per meter	KG/M
Kilogram per square centimeter	K/C2
Kilopascal	KPA
Kilopascal * second / meter	KPSM
Kilopascal per meter	KP/M
Magnetic field gamma	GAM
Magnetic field oersted	OER
Megapascal squared	MPA-2
Megapascal	MAPA
Meter	M
Meter per minute	M/MN
Meter per sec square	M/S2
Meter per second	M/S
Meters per hour	M/HR
Metric ton	MTON
Mhos per meter	MH/M
Micro amperes	UA
Micro reciprocal Pascal	URPA
Micro volts	UV
Microgram	UG
Microgram per cubic centimeter	UG/C
Microsecond	US
Microsecond per foot	US/F
Microsecond per meter	US/M
Millidarcy * feet	MDFT
Millidarcy * meters	MDM
Millimeters squared	MM2
Milliampere	MA
Millidarcy	MD
Milligal	MGL
Millimeters	ML
Millimeters	MM
Millimhos/meter	MM/M
Millimhos/meter (preferred)	MMHO
Million cubic feet per acre	MF3A
Million cubic feet per day	MCFD
Million cubic feet per day	MF3D
Millipascal seconds	MPS
Milliseconds	MS
Millisiemens per meter	MSIE
Millivolts	MV

CUSTOMER TAPE SUBSET

LOG INFORMATION STANDARD

Minute	MN
Nano watts	NW
Nanosecond per meter	NS/M
Nanoseconds	NS
Neutron API	NAPI
Newton	N
Newton per meter	N/M
Normalized count rate ratio	NC/C
Normalized count per sec	NC/S
Ohmmeter	OHMM
Parts per millions	PPM
Parts per thousands	PPK
Pascal	PA
Pascals per meter	PA/M
Per foot	/FT
Per Meter	/M
Per second	/SEC
Percentage by volume	%
Percentage by weight	W%
Pico reciprocal pascals	PRPA
Poiseuille	PL
Porosity unit	PU
Pounds	LB
Pounds per (American) gallon	LB/G
Pounds per cubic foot	LBCF
Pounds per foot	LB/F
Pounds per square inch	PSI
Pounds per square inch absolute	PSIA
Pounds per square inch gauge	PSIG
Pounds per square inch per foot	PSIF
PSI per foot	PS/F
Radian	RAD
Radian per meter	RA/M
Reciprocal microvolts	UV-1
Relative dielectric constant	E/E0
Relative magnetic permeability	U/U0
Revolutions per minute	RPM
Revolutions per second	RPS
Revolutions per second per foot per minute	RSFM
Revolutions per second per meter per minute	RSMM
Saybolt	SAYB
Second	S
Short ton	TON
Siemens per meter	SI/M
Square centimeter	CM2
Square foot	FT2
Square inch	IN2

LOG INFORMATION STANDARD

Square meter	M2
Tenths of an inch	.1IN
Thousand barrel * feet per day	KBFD
Thousand barrels per day	KB/D
Thousand cubic feet per day	KF3D
Thousand cubic meter * Meters per day	KMMD
Thousands cubic meter per day	KM3D
Volt	VOLT
Volts (either AC or DC, prefer over VOLT,VDC,VAC)	V
Volts DC	VDC
Volts per decibel	V/DB

APPENDIX E

HDT CUSTOMER TAPES

Dipmeter information will, in general, be encoded in the same fashion as all other log data.

HDT Answer Tape

1. Contains output data from PASS 2 or CLUSTER programs.
2. Contains data as standard frame entries.
3. May use alphanumeric representation code for data.
4. Contains LIS Logical Record Types:
 - a. Reel Header
 - b. Tape Header
 - c. File Header
 - d. Comment
 - e. Information
 - f. Data Format
 - g. Data
 - h. File Trailer
 - i. Tape Trailer
 - j. Reel Trailer

HDT Edit Tape

1. Contains output data from PASS 1 (HDT Edit) program.
2. Slow channel data is included as standard frame entry.
3. Fast channel data is included as one raw data block per frame (16 samples of each fast channel per raw data block).
4. Contains LIS Logical Record Types:
 - a. Reel Header
 - b. Tape Header
 - c. File Header

LOG INFORMATION STANDARD

- d. Comment
- e. Information
- f. Data Format
- g. Data
- h. File Trailer
- i. Tape Trailer
- j. Reel Trailer

One Frame Diagram	
Depth	standard frame entry
Azimuth	standard frame entry
Deviation	standard frame entry
Relative Bearing	standard frame entry
Caliper 1	standard frame entry
Caliper 2	standard frame entry
Potential I	standard frame entry
Potential II	standard frame entry
Scale	standard frame entry

The fast channel raw data block consists of 16 samples of the fast channels with each sample containing, in order, fast channels 0-4. Hence, the block is comprised of 80 bytes.

Sample 1	1 byte Fast Channel 0	1 byte Fast Channel 1	1 byte Fast Channel 2	1 byte Fast Channel 3	1 byte Fast Channel 4
Sample 16					

HDT CSU Field Tape (Beginning with Version 6 of CSU)

1. Contains data scaled in engineering units as standard frame entries.
2. Raw data is included in the raw data block. The raw data block consists of 16 samples of each fast channel followed by 10 slow channels.

LOG INFORMATION STANDARD

3. Contains LIS Logical Record Types:

- a. Reel Header
- b. Tape Header
- c. File Header
- d. Information
- e. Data Format
- f. Data
- g. File Trailer

One Frame Diagram	
Azimuth	standard frame entry
Relative Bearing	standard frame entry
Deviation	standard frame entry
Caliper 1	standard frame entry
Caliper2	standard frame entry

The raw data block consists of 16 sets of fast channel samples followed by 10 slow channels. The representation code is 234.

NOTE:

Other log data may appear as standard frame entries in addition to the entries named.

LOG INFORMATION STANDARD

Raw Data Block					
	1 byte	1 byte	1 byte	1 byte	1 byte
Sample 1	Fast Channel 0	Fast Channel 1	Fast Channel 2	Fast Channel 3	Fast Channel 4
Sample 16					
	Status	Reference	Reference Check	EMEX Scale	Pad Pressure
	Temperature	Far Electrode Potential 1	Far Electrode Potential 2	Raw Caliper 1	Raw Caliper 2

Within the raw data block, the Status slow channel provides information concerning the frame. The information is provided by using the bits as follows:

BIT	DESCRIPTION
0-4	Loss of sync. These bits are clear if sync was not lost. If sync was lost, these bits contain the sample number where the loss occurred. All bits are set if sync was lost for more than one sample in the frame.
5	Not used
6	If set, Reference slow channel was used in normalization.
7	If set, Reference Check was used in normalization.

The Reference or Reference Check slow channel is used to normalize the slow channels Pad Pressure, Temperature, and Raw Calipers 1 and 2.

The frame entries Azimuth, Relative Bearing, and Deviation are averaged for two measurements of each value. These entries are also normalized using the Reference or Reference Check slow channel and are scaled in degrees.

The Caliper frame entries are linearized and calibrated. The engineering units are inches.

APPENDIX F

PRE-EDIT TAPES

NON-DIPMETER TAPES

The pre-edited tape consists of data which have been converted from the Schlumberger field tape format to an LIS format but have undergone no further manipulation. Data is represented as 16-bit two's complement integer values. Mnemonics for curves may or may not have been added to the LIS tape. If not, then the mnemonics DEPT will be found for the first frame entry and WDnn (where nn is the Frame entry number) found for all other frame entry mnemonics.

DIPMETER TAPES

The pre-edited tape containing dipmeter data utilizes a representation code mechanism, called a raw data block. This mechanism implies that a frame entry is an arbitrary collection of bytes which requires information external to the LIS tape to be decoded properly.

The pre-edited tape containing dipmeter data will have only a single Datum Specification Block in its Data Format Record. The mnemonic will be either TDIP or RDDR, depending upon the field recorder used. TDIP indicates a TTR recorder; RDDR indicates a DDR recorder. In general, only TTR recorder tapes will be distributed as pre-edited tapes, so only the TDIP type raw data block is defined here.

If the Datum Specification Block has the curve name TDIP, then this particular frame entry will consist of a 96-byte grouping of data called a sequence. The structure of this sequence is defined as follows:

6 bytes = 1 frame
16 frames = 1 sequence
1 sequence = 96 bytes

LOG INFORMATION STANDARD

SEQUENCE STRUCTURE						
Frame	Byte 1	2	3	4	5	6
1	Depth	Fast Channel 3	Fast Channel 4	Fast Channel 0	Fast Channel 1	Fast Channel 2
2	Azimuth	"	"	"	"	"
3	Null	"	"	"	"	"
4	Deviation	"	"	"	"	"
5	Null	"	"	"	"	"
6	Relative Brg.	"	"	"	"	"
7	Null	"	"	"	"	"
8	Caliper 1	"	"	"	"	"
9	Null	"	"	"	"	"
10	Potential I	"	"	"	"	"
11	Null	"	"	"	"	"
12	Potential II	"	"	"	"	"
13	Null	"	"	"	"	"
14	Caliper 2	"	"	"	"	"
15	Null	"	"	"	"	"
16	Scale	"	"	"	"	"

Depth is a two-digit entry giving the hundred's and ten's position of the absolute depth.

The fast channels represent sampling of the resistivity at approximately .2- inch intervals. The slow channels (byte 1 of each frame) represent a sampling at 3.2-inch intervals.

APPENDIX G

INFORMATION RECORDS

A. Information Component Type Dictionary

COMPONENT	DEFINITION
0	Principal Well Site Datum
1	Index (Depth) Zone Limit - Larger
2	Index (Depth) Zone Limit - Smaller
3	Temperature
4	Source of Value (e.g., measured, calculated, interpolated, etc.)
69	Table Entry
73	Information Identifier

B. Information Component Category Dictionary

COMPONENT	DEFINITION
0	Identification
1	Environmental Parameters
2	Mud
3	Mechanical Description
4	Chronology
5	Cementing Information
6	Computation Parameter
73	Computation TYPE Information Identifier

LOG INFORMATION STANDARD

C. Information Component Mnemonic Dictionary

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	0		
0	0	AMD	Azimuth of Maximum Deviation
0	0	APIN	API Serial Number
0	0	ATIM	Accumulation Time Preset Value
0	0	BARI	Barite On/Off Switch
0	0	BHF	Borehole Fluid
0	0	BHM	Borehole Material
0	0	BHS	Borehole Status (Open or Cased)
0	0	BL1	Blank Line 1
0	0	BL2	Blank Line 2
0	0	BL3	Blank Line 3
0	0	BL4	Blank Line 4
0	0	BL5	Blank Line 5
0	0	BULL	Bullet Type
0	0	CABL	Cable Type
0	0	CBLG	CBL Gate Width
0	0	CDIA	Cartridge Diameter
0	0	CDTS	C-Delta-T Shale (Empirical Corr)
0	0	CLEN	Cable Length
0	0	CMDT	Cable Marking Device Type
0	0	CN	Company Name
0	0	CNCM	CNTA Calibration Mode
0	0	CONT	Continent
0	0	COUN	County
0	0	CPWN	CPW Number
0	0	CT	Caliper Type
0	0	CTRY	Country
0	0	DAPD	Distance above Permanent Datum
0	0	DATE	Date as month-day-year
0	0	DECO	ILD Deconvolution Processing Status
0	0	DESP	ILM & ILD Despiking Processing Status
0	0	DETE	Detection (for Sonic, E1, or E2)
0	0	DGT	Downhole Geophone Type
0	0	DICO	Digitizing Company Code
0	0	DIST	Schlumberger District
0	0	DREN	DRE Number
0	0	DSG	Downhole sensor gain

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	0	DSS	Downhole sensor source
0	0	DTF	Delta-T Fluid (Default 189)
0	0	ENGI	Engineer's Name
0	0	EW	Explosive Weight
0	0	FGS	Filter geophone selection
0	0	FL	Field Location
0	0	FN	Field Name
0	0	FPSS	Firing pulse sensor source
0	0	GDTL	Gun Depth to Tide Level
0	0	GRSS	Gamma Ray Source Selector
0	0	GTSP	Geophone time starting point
0	0	GVOL	Gun Volume
0	0	HDTL	Hydrophone Depth to Tide Level
0	0	HIDE	Header Identifier
0	0	HLD	Header Legal Disclaimer
0	0	HTL	High Tide Level
0	0	HTLD	High Tide Level Day
0	0	HTLH	High Tide Level Hour
0	0	HTLM	High Tide Level Minute
0	0	HTS	Horizontal time scale
0	0	INUM	Instrument Number
0	0	JTYP	Job Type
0	0	KPDU	Keyboard Printer Depth Units
0	0	LATI	Latitude
0	0	LCC	Logging Company Code
0	0	LDSN	LDT Tool Serial Number
0	0	LIKB	Likeness beginning of window
0	0	LIKT	Likeness type of processing (frame/side/none)
0	0	LIKW	Likeness width of window
0	0	LONG	Longitude
0	0	LTL	Low Tide Level
0	0	LTLD	Low Tide Level Day
0	0	LTLH	Low Tide Level Hour
0	0	LTLM	Low Tide Level Minute
0	0	LUL	Logging Unit Location
0	0	LUN	Logging Unit Number
0	0	MDEN	Matrix Density
0	0	MHD	Maximum Hole Deviation
0	0	MNEM	Mnemonic
0	0	MTTC	Manual transit time computation
0	0	MW	Mud Weight

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	0	NGSN	NGT Tool Serial Number
0	0	OPER	Operator's Code
0	0	PROV	Province
0	0	PTYP	Platform Type
0	0	R1	Remark Line 1
0	0	R2	Remark Line 2
0	0	R3	Remark Line 3
0	0	R4	Remark Line 4
0	0	R5	Remark Line 5
0	0	RANG	Range
0	0	RG21	RHO GRAIN (2 mineral model, MIN-1)
0	0	RG22	RHO GRAIN (2 mineral model, MIN-2)
0	0	RG23	RHO GRAIN (2 mineral model, MIN-3)
0	0	RG31	RHO GRAIN (3 mineral model, MIN-1)
0	0	RG32	RHO GRAIN (3 mineral model, MIN-2)
0	0	RG33	RHO GRAIN (3 mineral model, MIN-3)
0	0	RING	Ring Type
0	0	ROTA	Rotation Angle
0	0	RTMS	Rotary Table to Mean Sea Level
0	0	RTTL	Rotary Table to Tide Level
0	0	RTYP	Rig Type
0	0	RUN	Run Number
0	0	SBYS	Side-by-side WF/VDL on/off switch
0	0	SECT	Section
0	0	SON	Service Order Number
0	0	SPOA	Source Position Offset Azimuth
0	0	SPOD	Source Position Offset Distance
0	0	SRDG	Seismic Reference Datum to Ground Level
0	0	SRDR	Seismic Reference Datum to Rotary Table
0	0	SSGA	Surface Sensor Gain
0	0	SSS	Surface Sensor Source
0	0	SSTY	Surface Sensor Type

L O G I N F O R M A T I O N S T A N D A R D

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	0	STEM	Surface Temperature
0	0	STWS	Source Type - Well Seismic
0	0	STYP	Source Type
0	0	SZMS	Schlumberger Zero to Mean Sea Level
0	0	TC	Track Coverage for Waveform/VDL Logs
0	0	TLMS	Tide Level to Mean Sea Level
0	0	TOWN	Township
0	0	TPML	Time Propagation Matrix-Lime
0	0	TTRN	TTR Number
0	0	UM31	U-Matrix (3 mineral model, MIN-1)
0	0	UM32	U-Matrix (3 mineral model, MIN-2)
0	0	UM33	U-Matrix (3 mineral model, MIN-3)
0	0	VAS	Vertical amplitude scale
0	0	WDMS	Water Depth to Mean Sea Level
0	0	WFAE	Waveform Amplitude Exponent
0	0	WITN	Witness's Name
0	0	WN	Well Name
0	1	BHT	Bottom Hole Temperature
0	1	MRT	Maximum Recorded Temperature
0	1	ST	Surface Temperature
0	2	DFD	Drilling Fluid Density
0	2	DFL	Drilling Fluid Loss
0	2	DFPH	Drilling Fluid Ph
0	2	DFT	Drilling Fluid Type
0	2	DFV	Drilling Fluid Viscosity
0	2	MCSS	Mud Cake Sample Source
0	2	MCST	Mud Cake Sample Temperature
0	2	MFSS	Mud Filtrate Sample Source
0	2	MFST	Mud Filtrate Sample Temperature
0	2	MSG	Mud Specific Gravity
0	2	MSS	Mud Sample Source
0	2	MST	Mud Sample Temperature
0	2	MT	Mud Type
0	2	MVIS	Mud Viscosity

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	2	RM	Mud Resistivity
0	2	RMB	Mud Resistivity at BHT
0	2	RMC	Mud Cake Resistivity
0	2	RMF	Mud Filtrate Resistivity
0	2	RMS	Resistivity of Mud Sample
0	2	RWS	Resistivity of Water Sample
0	2	TCS	Time Circulation Stopped
0	2	WL	Water Loss
0	2	WSS	Water Sample Source
0	2	WST	Water Sample Temperature
0	3	BLI	Bottom Log Interval
0	3	BS	Bit Size
0	3	BS1	Bit Size 1
0	3	BS2	Bit Size 2
0	3	BS3	Bit Size 3
0	3	BSD1	Bit Size Depth 1
0	3	BSD2	Bit Size Depth 2
0	3	BSD3	Bit Size Depth 3
0	3	CBD1	Casing Bottom (Driller) 1
0	3	CBD2	Casing Bottom (Driller) 2
0	3	CBD3	Casing Bottom (Driller) 3
0	3	CBL1	Casing Bottom (Logger) 1
0	3	CBL2	Casing Bottom (Logger) 2
0	3	CBL3	Casing Bottom (Logger) 3
0	3	CS	Casing Size
0	3	CS1	Casing Size 1
0	3	CS2	Casing Size 2
0	3	CS3	Casing Size 3
0	3	CSD	Casing Shoe (Driller)
0	3	CW1	Casing Weight 1
0	3	CW2	Casing Weight 2
0	3	CW3	Casing Weight 3
0	3	DD	Depth Driller
0	3	DL	Depth Logger
0	3	DMF	Drilling Measured From
0	3	EDF	Elevation of Derrick Floor
0	3	EGL	Elevation of Ground Level
0	3	EKB	Elevation of Kelly Bushing
0	3	EPD	Elevation of Perm. Datum
0	3	FAPD	Feet Above Perm. Datum
0	3	LMF	Log Measured From

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
0	3	MP	Measuring Point
0	3	PD	Permanent Datum
0	3	TDD	Total Depth - Driller
0	3	TDL	Total Depth - Logger
0	3	TLI	Top Log Interval
0	4	DAY	Date - Day
0	4	HOUR	Date - Hour
0	4	MINU	Date - Minute
0	4	MONT	Date - Month
0	4	SECO	Date - Second
0	4	TLAB	Time Logger At Bottom
0	4	YEAR	Date - Year
6	6	MTD	Measured Test Depth
6	6	SFPT	Short Free Pipe Time
60	0	BAND	Band width
69	0	3MSG	3 Ft Minimum Sliding Gate
69	0	5MSG	5 Ft Minimum Sliding Gate
69	0	7MSG	7 Ft Minimum Sliding Gate
69	0	ADEL	Actual (Digitizing) Delay
69	0	AGC	Automatic Gain Control
			Allow/Disallow
69	0	AGM	Amplitude Gate Mode for CBL
69	0	APD	Above Permanent Datum
69	0	APEP	Auxiliary Power Enable for PGTM
69	0	APME	After Plus Measured
69	0	ATC	Automatic Temperature
			Correction
69	0	AWT	Analog Waveform Transmission
69	0	AZME	After Zero Measured
69	0	BEGI	Begin curve name (for
			area shading)
69	0	BFTC	Background Filter
			Time Constant
69	0	BMCS	Backup Mode
			Channel Selection
69	0	BMOD	DIT-X Processing Switch
69	0	BSAL	Borehole Salinity
69	0	BSIG	Bound Sigma (water)
69	0	BTFS	Buildup Time
			Function Selection
69	0	CBLS	CBL Source
69	0	CBPP	Continuous Base
			Polarization Period

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	CD	Cartridge Diameter
69	0	CDEP	Current Depth (Shooting)
69	0	CGM	Channel Grouping Mode (ORS)
69	0	CHAN	Channel
69	0	CLAB	County Label (Comments)
69	0	CMON	Calibration Month of Hewlett-Packard Gauge
69	0	CNUM	Channel Number
69	0	CODI	Trace Code
69	0	CPIF	Count Rate Porosity Indicator Flag
69	0	CSHO	Current Shot
69	0	CSTA	Constant Status
69	0	CUL	Movable Oil Plot Caliper Upper Limit
69	0	CURR	Current (Total)
69	0	CVOL	Chamber Volume
69	0	CWEI	Casing Weight (per Foot)
69	0	CYEA	Calibration Year of Hewlett-Packard Gauge
69	0	DAD	D/A Delay
69	0	DAGC	Downhole AGC Allow/Disallow
69	0	DAM	D/A Multiplier
69	0	DAR	D/A Rate
69	0	DCON	Depth Constant Interval
69	0	DCP	Direct Current Polarity
69	0	DDEL	Digitizing Delay
69	0	DEST	Logical Film Track Destination
69	0	DEWD	Differential East/West Drift
69	0	DGF1	Deep 10KHZ Induction Gain Factor
69	0	DGF2	Deep 20KHZ Induction Gain Factor
69	0	DGF4	Deep 40KHZ Induction Gain Factor
69	0	DGF8	Deep 80KHZ Induction Gain Factor
69	0	DHT	Down Hole Temperature
69	0	DIRE	Direction to view the data
69	0	DNSD	Differential North/South Drift

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	DP	Dead Period
69	0	DPM1	Duration of Plus Measurement 1
69	0	DPM2	Duration of Plus Measurement 2
69	0	DPM3	Duration of Plus Measurement 3
69	0	DPM4	Duration of Plus Measurement 4
69	0	DPM5	Duration of Plus Measurement 5
69	0	DPM6	Duration of Plus Measurement 6
69	0	DRE1	Deep Real 10KHZ Induction Error Correction
69	0	DRE2	Deep Real 20KHZ Induction Error Correction
69	0	DRE4	Deep Real 40KHZ Induction Error Correction
69	0	DRE8	Deep Real 80KHZ Induction Error Correction
69	0	DRO1	Deep Real 10KHZ Induction Error Correction
69	0	DRO2	Deep Real 20KHZ Induction Error Correction
69	0	DRO4	Deep Real 40KHZ Induction Error Correction
69	0	DSCA	Depth Scale
69	0	DSEC	Deep Sonde Error Correction
69	0	DSG1	Deep 10KHZ Induction Gain Factor
69	0	DSG2	Deep 20KHZ Induction Gain Factor
69	0	DSG4	Deep 40KHZ Induction Gain Factor
69	0	DSIN	Digitizer Sample Interval
69	0	DSPA	Digitizer Spacing
69	0	DWCO	Digitizer Word Count
69	0	DWF	Digitized Wave Forms

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	DWFS	Digitized Wave Forms Spacing
69	0	DXE1	Deep Imaginary 10KHZ Induction Error Correction
69	0	DXE2	Deep Imaginary 20KHZ Induction Error Correction
69	0	DXE4	Deep Imaginary 40KHZ Induction Error Correction
69	0	DXE8	Deep Imaginary 80KHZ Induction Error Correction
69	0	DXO1	Deep Imaginary 10KHZ Induction Error Correction
69	0	DXO2	Deep Imaginary 20KHZ Induction Error Correction
69	0	DXO4	Deep Imaginary 40KHZ Induction Error Correction
69	0	DZM1	Duration of Zero Measurement 1
69	0	DZM2	Duration of Zero Measurement 2
69	0	DZM3	Duration of Zero Measurement 3
69	0	DZM4	Duration of Zero Measurement 4
69	0	DZM5	Duration of Zero Measurement 5
69	0	DZM6	Duration of Zero Measurement 6
69	0	E	E (Stretch Coefficient of the Cable)
69	0	EDEL	Estimation Delay
69	0	EDS	Edit Data Selection
69	0	EEND	Estimation End
69	0	ELIM	Elimination
69	0	EMAT	EPT Matrix
69	0	END	End curve name (for area shading)
69	0	EOFF	ETIM Output to Film Flag
69	0	EREC	Envelope Recording
69	0	ES	Envelope Select
69	0	ESTI	Estimator

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	EUCF	Engineering Units Conversion Factor
69	0	F1FA	Fluid 1 Far A (Count Rate)
69	0	F1FB	Fluid 1 Far B (Count Rate)
69	0	FCD	Future Casing Diameter
69	0	FD	Fluid Density
69	0	FDCC	FDC Compensation
69	0	FDEN	Fluid Density
69	0	FDSD	Fluid Displacement Sleeve Diameter
69	0	FEXP	F-EXP. for Formation Factor Formula
69	0	FFAD	Fast Formation Arrivals Destination
69	0	FILT	Smoothing Constant
69	0	FMSG	Far Detector Minimum Sliding Gate Time
69	0	FNUM	F-Numerator for Formation Fac. Formula
69	0	FORM	Format
69	0	FPD	Fire Pulse Delay
69	0	FRAT	Firing Rate
69	0	FSF	TDT Far Scale Factor for Count Rate
69	0	FSIZ	Frame Size
69	0	FTC	Formation Time Constant
69	0	FTN	Formation Test Number
69	0	G0HP	G0 HP Function Former Coefficient
69	0	G1HP	G1 HP Function Former Coefficient
69	0	G2HP	G2 HP Function Former Coefficient
69	0	G3HP	G3 HP Function Former Coefficient
69	0	GAIN	Gain
69	0	GCOD	Grid Code
69	0	GDEC	Grid Decade

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	GNC	Gamma-ray Neutron Cartridge (Serial Number)
69	0	GNCM	Gamma-ray Neutron Calibration Mode
69	0	GNSP	Gamma-ray Neutron Shop Plus Measurement
69	0	GNSW	Gamma-ray Neutron Shop Water Measurement
69	0	GNSZ	Gamma-ray Neutron Shop Zero Measurement
69	0	GRC	Gamma-ray Correction
69	0	GRUL	Movable Oil Plot Gamma Ray Upper Limit
69	0	GSIF	Gamma Ray Shale Indicator Flag
69	0	H0HP	H0 HP Function Former Coefficient
69	0	H1HP	H1 HP Function Former Coefficient
69	0	H2HP	H2 HP Function Former Coefficient
69	0	H3HP	H3 HP Function Former Coefficient
69	0	HC	Hole Correction (Bit Size or Caliper)
69	0	HEIG	Height
69	0	HPGT	HP Gauge Temperature
69	0	HSIG	Hydrocarbon Sigma
69	0	I0HP	I0 HP Function Former Coefficient
69	0	I1HP	I1 HP Function Former Coefficient
69	0	I2HP	I2 HP Function Former Coefficient
69	0	I3HP	I3 HP Function Former Coefficient
69	0	ICVD	Integrated Cement Volume Destination
69	0	IDCO	Initial Depth Constant for FIL
69	0	IHVD	Integrated Hole Volume Destination

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	ITTD	Integrated Transit Time Destination
69	0	ITTS	Integrated Transit Time Source
69	0	J0HP	J0 HP Function Former Coefficient
69	0	J1HP	J1 HP Function Former Coefficient
69	0	J2HP	J2 HP Function Former Coefficient
69	0	J3HP	J3 HP Function Former Coefficient
69	0	KFAC	K Factor
69	0	KNOB	Knob (Sonic Multifunction)
69	0	LAMD	Low Attenuation Mark Destination
69	0	LARM	Larmar Frequency
60	0	LEDG	Left edge of trace in engineering units
69	0	LEJE	Lower Ejector
69	0	LENG	Length
69	0	LLOO	Laterolog Loop
69	0	LLTC	LDT Loop Time Constant
69	0	LMOD	Logging Mode
69	0	LPRO	Laterolog Processing (Constant)
69	0	LPS	Line Plot Selection
69	0	LWIR	Logging Wire Selection
69	0	MATR	Matrix
69	0	MATX	CNTE Matrix Constant
69	0	MCOR	Mud Correction
69	0	MCT	Mechanical Cartridge Type
69	0	MDEC	Magnetic Declination
69	0	MEPT	Mode EPT
69	0	MG	Multi-Gain
69	0	MGAI	Maximum Gain (Sonic)
69	0	MGF1	Medium 10KHZ Induction Gain Factor
69	0	MGF2	Medium 20KHZ Induction Gain Factor
69	0	MGF4	Medium 40KHZ Induction Gain Factor

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	MGF8	Medium 80KHZ Induction Gain Factor
69	0	MINC	Magnetic Inclination
69	0	MLLF	MLL Flag (Present/Absent)
69	0	MLLS	Mode Loop Long Spacing (Open/Close)
69	0	MLSS	Mode Loop Short Spacing (Open/Close)
69	0	MMDU	Magnetic Mark Depth Units
69	0	MODE	Transformation Mode
69	0	MPOI	Measure point from tool bottom
69	0	MRE1	Medium Real 10KHZ Induction Error Correction
69	0	MRE2	Medium Real 20KHZ Induction Error Correction
69	0	MRE4	Medium Real 40KHZ Induction Error Correction
69	0	MRE8	Medium Real 80KHZ Induction Error Correction
69	0	MRO1	Medium Real 10 KHZ Induction Error Correction
69	0	MRO2	Medium Real 20KHZ Induction Error Correction
69	0	MRO4	Medium Real 40 KHZ Induction Error Correction
69	0	MSA	Minimum Sonic Amplitude
69	0	MSFQ	Induction Frequency
69	0	MSG1	Medium 10KHZ Induction Gain Factor
69	0	MSG2	Medium 20KHZ Induction Gain Factor
69	0	MSG4	Medium 40KHZ Induction Gain Factor
69	0	MSIG	Matrix Sigma
69	0	MXE1	Medium Imaginary 10KHZ Induction Error Correction
69	0	MXE2	Medium Imaginary 20KHZ Induction Error Correction
69	0	MXE4	Medium Imaginary 40KHZ Induction Error Correction
69	0	MXE8	Medium Imaginary 80KHZ Induction Error Correction

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	MXO1	Medium Imaginary 10KHZ Induction Error Correction
69	0	MXO2	Medium Imaginary 20KHZ Induction Error Correction
69	0	MXO4	Medium Imaginary 40KHZ Induction Error Correction
69	0	NIFA	Near 1 Fluid A (Count Rate)
69	0	NIFB	Near 1 Fluid B (Count Rate)
69	0	NALN	NML Average Level Noise
69	0	NC	Noise Control (Allow/ Disallow Flag)
69	0	NFAC	Noise Factor
69	0	NGAS	TDT Near Gas Count Rate
69	0	NGTL	NGT Loop
69	0	NMOD	NML Mode
69	0	NMSG	Near Detector Minimum Sliding Gate Time
69	0	NPP	Normal Polarization Period
69	0	NSDP	NML Stationary Dead Period
69	0	NSF	NML Signal Factor
69	0	NSIN	Neutron Shale Input
69	0	NSPN	NML Stationary Pulse Number
69	0	NSR	Neutron Source Radioactive Number
69	0	OFFS	Offset
69	0	OGS	Oil/Gas Selection
69	0	OMD	Optical Monitor Direction
69	0	ORDU	ORS Depth Units
69	0	OS1	Other Services Line 1
69	0	OS2	Other Services Line 2
69	0	OS3	Other Services Line 3
69	0	OUTP	Output channel name
69	0	PATT	Pattern of area shading
69	0	PC	Phase Cut
69	0	PDES	Plot Destination
69	0	PF	Printer Format
69	0	PGS	Pressure Gauge Selection
69	0	PGTC	PGT Calibrator Type
69	0	PLHV	Programmable Log Spacing High Voltage
69	0	PLOT	Plot Type

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	PMEA	Calibration Plus Measured
69	0	PMHV	Photo Multiplier High Voltage
69	0	PMIN	Porosity Minimum
69	0	PMOD	Plot Mode
69	0	PNUM	Prototype Number (Experimental)
69	0	POLA	Polarization
69	0	POS	Printer Output Spacing
69	0	POSN	Position from the bottom
69	0	POWD	Powder Type
69	0	PPF	Physical Presence Flag
69	0	PPR	Pulser Peak Ratio
69	0	PREF	Calibration Plus Reference
69	0	PREM	Pulse Removal
69	0	PSFF	Plus Shop Far FDC
69	0	PSHV	Programmable Short Spacing High Voltage
69	0	PSNF	Plus Shop Near FDC Calibration Value
69	0	PSNR	Plus Shop Near Ratio Calibration Value
69	0	PVUM	Pip Volume Units Multiplier
69	0	RATE	Firing Rate
69	0	REDG	Right edge of trace in engineering units
69	0	RLM	RFT Logging Mode
69	0	RMOD	Receiver Mode
69	0	SATY	Sample per frame
69	0	SBPP	Stationary Base Polarization Period
69	0	SCOR	Sigma Correction by Quality Factor
69	0	SD	Start Depth for Depth System Failures
69	0	SDSP	Source-Detector Spacing
69	0	SEL1	Selection for 1st Monitor Trace

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	SEL2	Selection for 2nd Monitor Trace
69	0	SEL3	Selection for 3rd Monitor Trace
69	0	SEL4	Selection for 4th Monitor Trace
69	0	SEXP	Saturation Exponent
69	0	SFAF	Sonic Formation Attenuation Factor
69	0	SFF	SARABAND Function Former Flag
69	0	SGAT	Sliding Gate Allow/Disallow
69	0	SGSN	Strain Gauge Serial Number
69	0	SGW	Sliding Gate Width
69	0	SHIF	Shift
69	0	SHPF	Sonic High Pass Filter Allow/Disallow
69	0	SIMU	Simulator (NSM Signal Source Constant)
69	0	SLAB	State Label (Comments)
69	0	SLC	Sonic Logging Cartridge
69	0	SLEV	Signal Level (for AGC)
69	0	SLR	Sonic Logging Receiver
69	0	SLS	Sonic Logging Sonde
69	0	SNRA	Plus Shop Ratio
69	0	SOCN	Stand Off for CNL
69	0	SPAC	Space Between Upper Transmitter and Lower Receiver
69	0	SPD1	Supplementary Plot Documentation 1
69	0	SPD2	Supplementary Plot Documentation 2
69	0	SPD3	Supplementary Plot Documentation 3
69	0	SPD4	Supplementary Plot Documentation 4
69	0	SPD5	Supplementary Plot Documentation 5
69	0	SPDN	Stationary Pulse Duration Number
69	0	SPDR	SP Drift

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	SPEE	Speed
69	0	SPF	Shallow Power Factor
69	0	SPR	Induction SP Reference
69	0	SRET	Shooting Return
69	0	SS	Sweep Speed for Waveform/VDL Loop
69	0	SSD	Shot Summary Destination
69	0	SSHA	Sigma Shale (Parameter- Maximum)
69	0	SSIF	Sigma Shale Indicator Flag
69	0	STC	Stacking Time Constant
69	0	T0D	T0 Delay (for Waveform/ VDL Logs Allow/Disallow Flag)
69	0	T2HI	T2 high limit
69	0	T2LO	T2 low limit
69	0	TCRV	Transducer Calibration Resistance Value (at 350 DEG F)
69	0	TDCA	True Depth Computation Algorithm
69	0	TECS	Tool Error Contingency Switch
69	0	TEWD	Tie East/West Drift
69	0	TFR	Telemetry Frame Rate
69	0	TLST	Tool Logging State
69	0	TMS	Temperature of Mud Sample
69	0	TN1	Tool Number 1
69	0	TN10	Tool Number 10
69	0	TN11	Tool Number 11
69	0	TN12	Tool Number 12
69	0	TN2	Tool Number 2
69	0	TN3	Tool Number 3
69	0	TN4	Tool Number 4
69	0	TN5	Tool Number 5
69	0	TN6	Tool Number 6
69	0	TN7	Tool Number 7
69	0	TN8	Tool Number 8
69	0	TN9	Tool Number 9
69	0	TNPS	Thermal Neutron Porosity Selection

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	TNSD	Tie North/South Drift
69	0	TOOL	Tool
69	0	TRAC	Track(s) where trace appears
69	0	TREF	Tension Reference (of the Cable)
69	0	TRG	TDT Ratio Gain
69	0	TRZ	TDT Ratio Zero
69	0	TSCL	TDT Shale Clean
69	0	TSI	Test Sample Identifier
69	0	TSIF	TDT Shale Indicator Flag
69	0	TSSH	TDT Shale Shaley
69	0	TSUR	Temperature at Surface
69	0	TTD	True Test Depth
69	0	TTS	TT Source
69	0	TTUN	Trace Tune
69	0	TWS	Temperature of Water Sample
69	0	TZRV	Transducer Zero Resistance Value (at 32 DEG F)
69	0	UAGC	Uphole AGC Allow/Disallow
69	0	UEJE	Upper Ejector
69	0	UNIT	Units
69	0	UWW	Upper Window Width
69	0	VALU	Value
69	0	VDLD	VDL Destination for VDL Logs
69	0	VWF	Viewable Waveforms
69	0	VWM	View Waveform Mode
69	0	WALN	Waveform Average Level Noise
69	0	WCAL	Waveform Calculation
69	0	WDC	Waveform Depth Constant
69	0	WDSF	WDM Display Scale Factor
69	0	WEIG	Weight
69	0	WFD	Waveform Destination for Sonic Waveform
69	0	WFM	Waveform Mode for Waveform/VDL Log

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	0	WFS	Waveform Spacing for Waveform Logs
69	0	WR	Waveform Recording
69	0	WSD	Waveform Scaling Delay
69	0	ZMEA	Calibration Zero Measured
69	0	ZREF	Calibration Zero Reference
69	1	BTHI	Bed Thickness
69	1	RFST	Recovered Fluid Sample Temperature
69	1	RFTT	Repeat Formation Tester Temperature
69	3	FFV	Formation Fluid Viscosity
69	3	FPRE	Formation Pressure
69	3	HPSN	Hewlett-Packard Serial Number
69	3	SGSO	Strain Gauge Selection Option
69	6	AGDP	Amplitude Gate Past Detection
69	6	AGPD	Amplitude Gate Past Detection
69	6	AOFF	Alphanumeric Output to Film Flag
69	6	APRE	Atmospheric Pressure
69	6	BCT	Buildup Cutoff Time
69	6	C1V	Chamber 1 Volume
69	6	C2V	Chamber 2 Volume
69	6	CFF	Compressibility of Formation Fluid
69	6	CLIM	Caliper Limit for Sonic
69	6	CRRV	Calibration Resistor Reference Value
69	6	D3GB	Downhole 3 ft Gain Boost
69	6	D7GB	Downhole 7 ft Gain Boost
69	6	DGAI	Downhole Gain
69	6	DGM	Downhole Gain Maximum
69	6	DLEV	Downhole Level for AGC
69	6	DLLM	Density Lower Limit for Mineral Detection
69	6	DRUL	Delta-RHO Upper Limit
69	6	DTM	Delta Time Matrix

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	DUL	Differential-density Upper Limit (Movable Oil Plot)
69	6	ELM	EPT Lime Matrix
69	6	ETD	Elapsed Time Delay
69	6	FBP	Final Buildup Pressure
69	6	FBS	Final Buildup Slope
69	6	FCAL	Flag for Caliper Present/Absent
69	6	FEPT	Flag for EPT Availability
69	6	FESX	Flag for ESXO
69	6	FPIA	Free Pipe Amplitude
69	6	FRT	Flag for Rt
69	6	FRTC	Flag for Rt Correction
69	6	GDCL	Grain Density Clean Line
69	6	GDSH	Grain Density Shale
69	6	GRCL	GR Clean Line
69	6	GRSH	GR Shale
69	6	GULM	Gamma-ray Upper Limit for Mineral Detection
69	6	HPRE	Hydrostatic Pressure
69	6	HPT	Hewlett-Packard Temperature
69	6	KCON	Permeability Constant
69	6	KD1	Permeability from Drawdown 1
69	6	KD2	Permeability from Drawdown 2
69	6	KES	Permeability Equation Selection
69	6	KEXP	Permeability Exponent
69	6	KIB	Permeability Index from Buildup
69	6	KTP	Permeability-Thickness Product
69	6	LABS	Line Abscissa
69	6	LBPL	Line Bottom Plot Limit
69	6	LDTA	LDT Available Flag
69	6	LFPT	Long Free Pipe Time
69	6	LLPL	Line Left Plot Limit
69	6	LORD	Line Ordinate
69	6	LOS	Line Option Selection
69	6	LRPL	Line Right Plot Limit
69	6	LSLO	Line Slope
69	6	LSWB	Limit SWB by SWT
69	6	LTPL	Line Top Plot Limit
69	6	LWB	Line Window Bottom
69	6	LWLE	Line Window Left Edge

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	LWRE	Line Window Right Edge
69	6	LWT	Line Window Top
69	6	MDET	Mineral Detection
69	6	MEA	Minimum Attenuation Expected
69	6	MSEC	Medium Sonde Error Correction
69	6	NGSI	Neutron and Grain- Density Shale Input Flag
69	6	NLIM	Neutron Limit
69	6	NMLA	NML Available Flag
69	6	NPCL	Neutron Porosity Clean Line
69	6	NPSH	Neutron Porosity Shale
69	6	PFAC	Proportionality Factor
69	6	PHI	Porosity
69	6	PLL	Porosity Lower Limit (Movable Oil Plot)
69	6	PMAX	PHI Maximum
69	6	POUT	Porosity Output
69	6	PSER	Plus Shop Epithermal Ratio Measurement
69	6	PSRR	Plus Shop Remote Ratio Measurement
69	6	PSTR	Plus Shop Thermal Ratio Measurement
69	6	PT1	Pressure at T1 Elapsed Time
69	6	PTP	Pressure at TP Elapsed Time
69	6	REPE	Repeats
69	6	RFAS	Recovered Fluid Analysis Selection
69	6	RFTC	Recovered Fluid Titrated Chlorides
69	6	RGA1	RHO Grain Apparent (MIN-1)
69	6	RGA2	RHO Grain Apparent (MIN-2)
69	6	RGA3	RHO Grain Apparent (MIN-3)
69	6	RMA1	RHO Matrix Apparent (MIN-1)
69	6	RMA2	RHO Matrix Apparent (MIN-2)
69	6	RMA3	RHO Matrix Apparent (MIN-3)

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	RMUL	Reciprocal Multiplier
69	6	RPU	RFT Panel Units
69	6	RRF	Resistivity of Recovered Fluid
69	6	RTLF	RT Limit Flag
69	6	RW	Resistivity of Water
69	6	RWB	Resistivity of Water (Bound)
69	6	RWF	Resistivity of Water (Free)
69	6	RX0F	RX0 Flag
69	6	SALI	Salinity (of the Mud)
69	6	SCNS	Slope Computation Number of Samples
69	6	SDGC	Source of DGCN
69	6	SFRC	Sonic Frequency Response Correction Factor
69	6	SGSF	Strain Gauge Smoothing Filter
69	6	SHT	Surface Hole Temperature
69	6	SINP	Shale Input
69	6	SIS	Shale Index Selector
69	6	SONI	Sonic Flag
69	6	SPCL	SP Clean Line
69	6	SPSH	SP Shale
69	6	T0FT	T0 Formation Test Start Time
69	6	T0P0	Temperature Point 0 Pressure Point 0
69	6	T0P1	Temperature Point 0 Pressure Point 1
69	6	T0P2	Temperature Point 0 Pressure Point 2
69	6	T0P3	Temperature Point 0 Pressure Point 3
69	6	T0P4	Temperature Point 0 Pressure Point 4
69	6	T0P5	Temperature Point 0 Pressure Point 5
69	6	T1	Time 1 (First Sample Flow Time)
69	6	T1P0	Temperature Point 1 Pressure Point 0

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	T1P1	Temperature Point 1 Pressure Point 1
69	6	T1P2	Temperature Point 1 Pressure Point 2
69	6	T1P3	Temperature Point 1 Pressure Point 3
69	6	T1P4	Temperature Point 1 Pressure Point 4
69	6	T1P5	Temperature Point 1 Pressure Point 5
69	6	T1P6	Temperature Point 1 Pressure Point 6
69	6	T2P0	Temperature Point 2 Pressure Point 0
69	6	T2P1	Temperature Point 2 Pressure Point 1
69	6	T2P2	Temperature Point 2 Pressure Point 2
69	6	T2P3	Temperature Point 2 Pressure Point 3
69	6	T2P4	Temperature Point 2 Pressure Point 4
69	6	T2P5	Temperature Point 2 Pressure Point 5
69	6	T2P6	Temperature Point 2 Pressure Point 6
69	6	T3P0	Temperature Point 3 Pressure Point 0
69	6	T3P1	Temperature Point 3 Pressure Point 1
69	6	T3P2	Temperature Point 3 Pressure Point 2
69	6	T3P3	Temperature Point 3 Pressure Point 3
69	6	T3P4	Temperature Point 3 Pressure Point 4
69	6	T3P5	Temperature Point 3 Pressure Point 5
69	6	T3P6	Temperature Point 3 Pressure Point 6
69	6	T4P0	Temperature Point 4 Pressure Point 0

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	T4P1	Temperature Point 4 Pressure Point 1
69	6	T4P2	Temperature Point 4 Pressure Point 2
69	6	T4P3	Temperature Point 4 Pressure Point 3
69	6	T4P4	Temperature Point 4 Pressure Point 4
69	6	T4P5	Temperature Point 4 Pressure Point 5
69	6	T4P6	Temperature Point 4 Pressure Point 6
69	6	T5P0	Temperature Point 5 Pressure Point 0
69	6	T5P1	Temperature Point 5 Pressure Point 1
69	6	T5P2	Temperature Point 5 Pressure Point 2
69	6	T5P3	Temperature Point 5 Pressure Point 3
69	6	T5P4	Temperature Point 5 Pressure Point 4
69	6	T5P5	Temperature Point 5 Pressure Point 5
69	6	T5P6	Temperature Point 5 Pressure Point 6
69	6	T6P0	Temperature Point 6 Pressure Point 0
69	6	T6P1	Temperature Point 6 Pressure Point 1
69	6	T6P2	Temperature Point 6 Pressure Point 2
69	6	T6P3	Temperature Point 6 Pressure Point 3
69	6	T6P4	Temperature Point 6 Pressure Point 4
69	6	T6P5	Temperature Point 6 Pressure Point 5
69	6	T6P6	Temperature Point 6 Pressure Point 6
69	6	T7P1	Temperature Point 7 Pressure Point 1

LOG INFORMATION STANDARD

TYPE	CATEGORY	MNEMONIC	DEFINITION
69	6	T7P2	Temperature Point 7 Pressure Point 2
69	6	T7P3	Temperature Point 7 Pressure Point 3
69	6	T7P4	Temperature Point 7 Pressure Point 4
69	6	T7P5	Temperature Point 7 Pressure Point 5
69	6	T7P6	Temperature Point 7 Pressure Point 6
69	6	TPDM	Time Propagation Dolomite Matrix
69	6	TPFM	Time Propagation Fixed Matrix
69	6	TPSM	Time Propagation Sand Matrix
69	6	TPT	Total Production Time
69	6	TVCO	True Vertical Correction
69	6	U3GB	Uphole 3 ft Gain Boost
69	6	U7GB	Uphole 7 ft Gain Boost
69	6	UF	U-Fluid
69	6	UGAI	Uphole Gain
69	6	UGM	Uphole Gain Maximum
69	6	ULEV	Uphole Level for AGC
69	6	UM11	U-Matrix Pass 1 (MIN-1)
69	6	UM12	U-Matrix Pass 1 (MIN-2)
69	6	UM13	U-Matrix Pass 1 (MIN-3)
69	6	UM21	U-Matrix Pass 2 (MIN-1)
69	6	UM22	U-Matrix Pass 2 (MIN-2)
69	6	UM23	U-Matrix Pass 2 (MIN-3)
69	6	WMUD	Weight of Mud
69	6	ZRRV	Zero Resistor Reference Value
73	0	TYPE	Information Identifier

A large number of parameters used in acquiring and processing the log data may be recorded on the LIS tape in Information records. The records will, in general, begin with a type 73 component block which identifies the kind of information the additional datum blocks contain. Datum blocks following the type 73 component block begin with a type 0 component block. The value of the type 0 component block is the name of the quantity described in succeeding component blocks in the datum block.

An Induction Sonic job is the basis for the following example.

There is one logical record for each of the table types, as identified by the type 73 component block:

LOG INFORMATION STANDARD

TOOL	- lists the tools in the tool string
INPU	- contains the names and calibration values for all input data channels
OUTP	- list of the outputs (channels) recorded
CONS	- list of the constants
PRES	- describes presentation of the traces in the graphical playback
FILM	- describes the film grids for the playback
AREA	- describes the area shading in the playback
EQUI	- lists peripheral status
#SCR	- scratch table, temporary storage block

Shown below is an example of a single Information Record where each row is a component block. Although the size, representation code, and category are the same in every component block in this example, other values for these entries are commonly used.

TYPE	REP CODE	SIZE	CATEGORY	MNEM	UNITS	COMPONENT
73	65	4	0	TYPE		FILM
0	65	4	0	MNEM		1
69	65	4	0	GCOD		E2E
69	65	4	0	GDEC		-2--
69	65	4	0	DEST		PF1
69	65	4	0	DSCA		S5
69	65	4	0	FORM		MRCO
0	65	4	0	MNEM		2
69	65	4	0	GCOD		BBB
69	65	4	0	GDEC		----
69	65	4	0	DEST		PF2
69	65	4	0	DSCA		S5
69	65	4	0	FORM		DUMM

LOG INFORMATION STANDARD

Examples of all the tables are shown in the following pages. Each row represents a datum block, and each column contains the component (value). The table type, component type 73., precedes the other datum blocks. The mnemonics are used as column headings. Note that the first component in each datum block is type 0. The FILM type record above is represented as follows:

TABLE TYPE: TOOL

MNEM	STAT
DTT	ALLO
PGTE	ALLO
CNTA	ALLO
SGTE	ALLO

TABLE TYPE: INPU

MNEM	UNIT	TOOL	ZREF	ZMEA	PREF	PMEA	AZME	APME
TENS	LB	DTT	0.0	0.0	0.0	0.0	0.0	0.0
SPAR	MV	DITB	0.0	0.0	0.0	0.0	0.0	0.0
SP	MV	DITB	0.0	0.0	0.0	0.0	0.0	0.0
SPMV	MV	DIT	0.0	0.0	0.0	0.0	0.0	0.0
CALI	IN	MCDB	8.0	0.0	12.0	0.0	0.0	0.0
NRAT		CNTA	0.0	0.0	2.1	0.0	0.0	0.0
FCNL	CPS	CNTA	0.0	0.0	0.0	0.0	0.0	0.0
NCNL	CPS	CNTA	0.0	0.0	0.0	0.0	0.0	0.0
SRAT		SLTL	0.0	0.0	0.0	0.0	0.0	0.0
TT	US	SLTL	0.0	0.0	0.0	0.0	0.0	0.0
CBL	MV	SLTL	0.0	0.0	0.0	0.0	0.0	0.0
AMPL	MV	SLTL	0.0	0.0	0.0	0.0	0.0	0.0
DT	US/F	SLTL	0.0	0.0	0.0	0.0	0.0	0.0
NOIS	MV	SLTL	0.0	0.0	0.0	0.0	0.0	0.0
LL8	MM/M	DITB	0.0	0.0	500.0	0.0	0.0	0.0
ILM	MM/M	DITB	0.0	0.0	461.0	0.0	0.0	0.0
ILD	MM/M	DITB	0.0	0.0	400.5	0.0	0.0	0.0
GR	GAPI	SGTE	0.0	0.0	165.0	0.0	0.0	0.0

TABLE TYPE: CONS

MNEM	STAT	UNIT	VALU
APIN	UNAL		
LATI	UNAL		
LONG	UNAL		
CONT	UNAL		
NATI	UNAL		
STAT	UNAL		
COUN	UNAL		
RANG	UNAL		
TOWN	UNAL		
SECT	UNAL		
FL	UNAL		
CN	UNAL		
FN	UNAL		
WN	UNAL		
IHVD	UNAL		1
SD	UNAL	FT	8192.0
FNUM	UNAL		1.0
FEXP	UNAL		2.0
FPHI	UNAL		PHIX
MSEC	UNAL	MM/M	4.5
SBR	UNAL	OHMM	1.0
DSEC	UNAL	MM/M	4.5
MATR	UNAL		SAND
HC	UNAL		CALI
BHS	UNAL		OPEN
CNCM	UNAL		JIG
PSNR	UNAL		0.0
ITTD	UNAL		NEIT
DTF	UNAL	US	189.0
DTM	UNAL	US	56.0
CDTS	UNAL	US	100.0
BS	UNAL	INCH	8.0
RW	UNAL	OHMM	1.0
YEAR	UNAL		1979.0
MONT	UNAL		0.0
DAY	UNAL		12.0
KPDU	UNAL	FEET	
ORDU	UNAL	FEET	
PF	UNAL		LONG

LOG INFORMATION STANDARD

TABLE TYPE: PRES

MNEM	STAT	OUTP	TRAC	CODI	DEST	LEDG	REDG
SP	ALLO	SP	T1	LLIN	1	-80.0	20.0
GR	ALLO	GR	T1	LLIN	1	0.0	150.0
CALI	ALLO	CALI	T1	LSPO	1	6.0	16.0
RWA	ALLO	RWA	T1	LDAS	1	0.0	0.5
LL8U	ALLO	LL8U	T23	LLIN	1	0.2	2000.0
ILM	ALLO	ILM	T23	LSPO	1	0.2	2000.0
ILDG	ALLO	ILD	T23	LDAS	1	0.2	2000.0
DT	ALLO	DT	T3	LLIN	1	150.0	50.0
NPHI	ALLO	NPHI	T23	LSPO	1	0.3	-0.1
9	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
10	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
11	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
12	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
13	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
14	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0
15	DISA	DUMM	T1	LLIN	NEIT	0.0	1.0

TABLE TYPE: FILM

MNEM	GCOD	GDEC	DEST	DSCA
1	E2E	-2--	PF1	S5
2	BBB	----	PF2	S5

TABLE TYPE: AREA

MNEM	STAT	BEGI	END	PATT	DEST
1	DISA	Z1	Z1	BLAN	NEIT
2	DISA	Z1	Z1	BLAN	NEIT

APPENDIX P

CHECKSUM ALGORITHM

A 16-bit checksum may appear in the physical record trailer. The algorithm used to compute the checksum is described below. Note that the algorithm assumes that there are an even number of bytes in the record.

1. The checksum is computed 2 bytes at a time, so zero the sums for the high and low order parts of the value. Initialize a byte counter to zero to be used in moving through the record.
2. Add the next (or first) byte to the high order part of the checksum. Multiply the sum by 2.
3. Add the next (+1) byte to the low order part of the checksum. Multiply the sum by 2.
4. If the low order sum is less than 256, proceed to step 5. Otherwise, add 1 to the high order sum, subtract 256 from the low order sum, and repeat step 4.
5. If the low order sum is less than 256, proceed to step 6. Otherwise, add 1 to the low order sum, subtract 256 from the high order sum, and go back to step 4.
6. Add 2 to the byte counter. If the byte counter is less than record size minus 2, go to step 2.
7. If the first byte of the recorded checksum agrees with the computed low order part and the second byte of the recorded checksum agrees with the computed high order part, then the checksum checks.